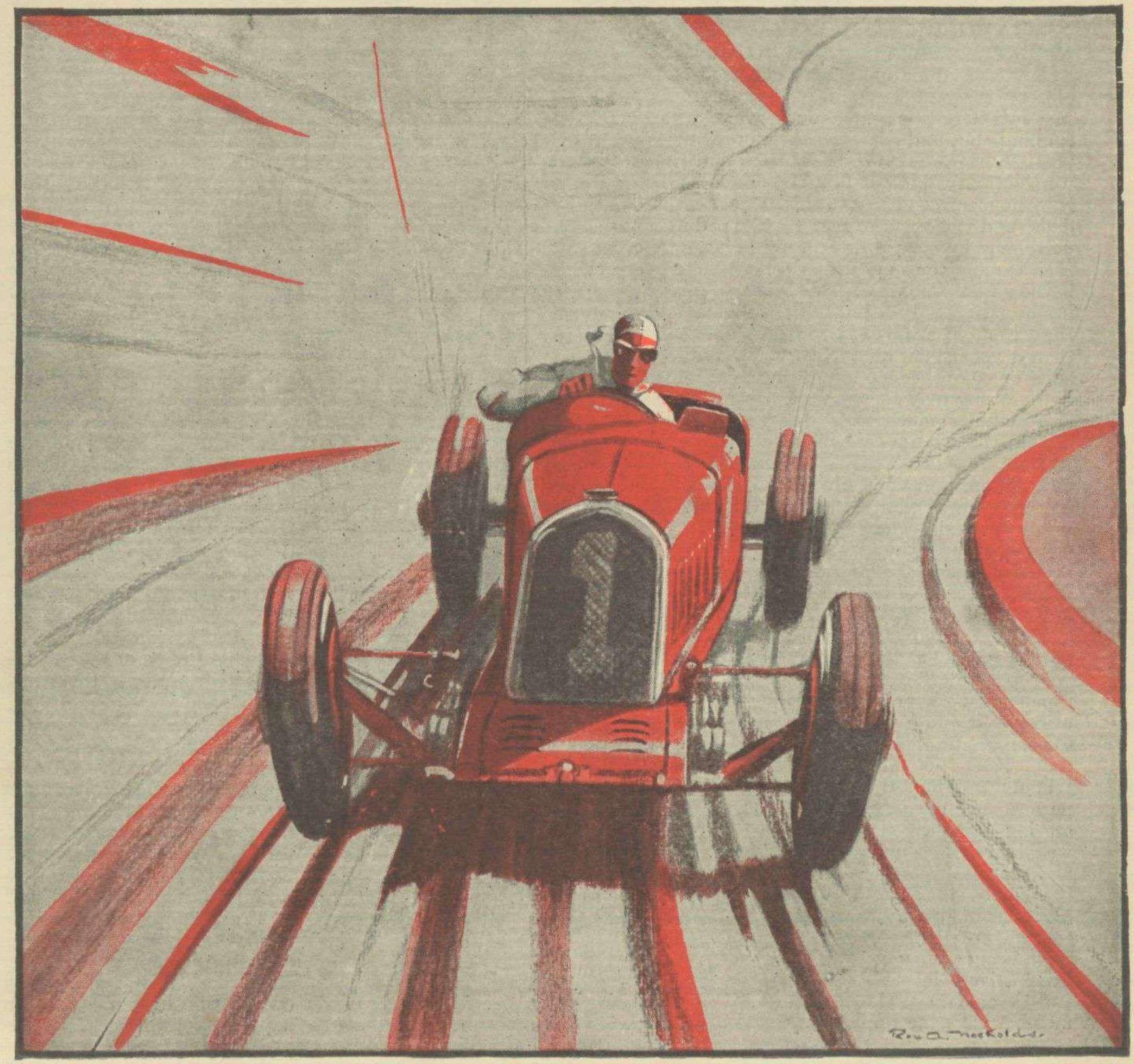
Vol. XVII No. 6. June, 1941

MOTOR SPORT

INCORPORATING

Speed

ONE SHILLING
MONTHLY



VOL. XVII. No. 6 JUNE, 1941 PRICE ONE SHILLING

SUBSCRIPTION RATE 13/6 PER ANN. POST PAID

MOTOR SPORT

OFFICIAL JOURNAL OF THE BRITISH RACING DRIVERS CLUB

INCORPORATING **SPEED** AND THE BROOKLANDS GAZETTE

ADVERTISING AND EDITORIAL OFFICES

21, CITY ROAD, LONDON, E.C.1

Telephone : NATional 3045

THINGS ARE NOT SO BAD

ALTHOUGH most motorists who are in receipt of supplementary fuel rations have recently received an appreciable cut in those rations, the outlook is by no means a gloomy one. As the basic fuel ration remains unchanged, those who have been running out-and-out sports motor-cars purely or partially as a means of relaxation, find themselves no worse off than before. On the other hand, our world is by no means confined to this class of enthusiast these days, and the users of fast cars who do get an extra petrol supply clearly do so only because they employ their cars for journeys which are conducted very much in the national interest. This being so, even although it has been necessary to cut fuel allowances and so reduce the extent of such journeys, it is unlikely that more than a very small number of users so affected will be able, or compelled, to lay up their car in consequence. So motoring may be expected to continue throughout this summer much as it has since war began. In certain cases large cars may be replaced by smaller-engined vehicles so that the same mileage as before may be covered on the owner's new fuel allowance; indeed, we hope that wherever this is practicable it will be undertaken. There is even a strong case for the sports car here, for when time-saving on road-travel is of the utmost importance, who will deny that our small sports cars are able to get about the country very pleasantly every bit as rapidly and securely as large utility cars and big American saloons, and on rather less than half the quantity of "Pool"? The British high-performance car in general is serving key-personnel very well indeed in the matter of war-time transport. When it is referred to as a "sports car" the unintelligent are apt to be shocked at the idea of big mileages being covered by keen drivers in such cars in war-time. They should remember that the present-day "sports car" is not merely a fun-machine, but a vehicle offering valuable fast transport, while burning its fuel economically and being essentially safe under difficult conditions. As such, it offers the best possible means of war-time travel for those to whom train and coach are of little avail in the pursuance of important tasks. If the traveller gets a deal of pleasurable relaxation while driving a car of this type, so much the better. Certainly the scaremongers can rest assured that the less dependable, more sporting fast cars are now either laid-up, awaiting happier times, or are being driven on the basic ration only, and consequently showing the Chancellor of the Exchequer a very handsome return. Since the commencement of hostilities we have carefully watched the attitude of officialdom towards the fast car handled by the expert driver. Very little may be disclosed of this matter at the present time, but one day there will be some remarkable stories to tell of long runs at very respectable average speeds, undertaken regularly in the national interest. We are extremely pleased to know that modern and vintage high-performance cars are playing a big part in such activities. There is, then, nothing much amiss with motoring within the limitations of war this summer of 1941, and we can continue to enjoy the long light evenings, which are appreciated by all who drive fast cars, whether by way of relaxation or duty.

Another aspect of this question should also be borne in mind. The speed of one's reaction to an emergency is greatly influenced by the familiarity which constant practice evokes, and once this facility is lost through lack of use it is not easily recovered. So from this point of view it is useful to permit the skilled fast driver to exercise his ability and keep hand, eye, and brain alert against the time when these qualities may once again be employed, in happier circumstances.

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CARS I HAVE OWNED

[So we come to No. 10 of this Series—by Sub-Lieut. G. P. Shea-Simonds, R.N.V.R.—Ed.]

I RESOLVED before starting to write this short history of my experiences to stick rigidly to the subject as expressed in the title above ; I am therefore going to write only about the cars that have, at one time or another, actually been my own property—as distinct from the quite considerable number of others that I have begged, borrowed, hired or otherwise been interested in during my motoring career.

My first car came to me on my sixteenth birthday as a present from my father, to whom I shall always be eternally grateful for all his tolerance and generosity in connection with my motoring from that day onward. As the law, of course, only allowed me three wheels to motor on at the tender age of sixteen years, the first car had to be a tricar—a J.M.B. being the make in question. This little car provided me with a lot of amusement and was, on the whole, a very workmanlike job. The open two-seater body was nicely finished and quite pleasant to look at, and the performance in view of the small power unit—an air-cooled, 500 c.c., single-cylinder J.A.P. engine—was very reasonable ; the acceleration was lively, if not exactly fierce, and 40-45 m.p.h. could be obtained without much difficulty. There were, it must be admitted, one or two disadvantages : although the suspension, steering and brakes were more than adequate at all times, the car was rather too light, which called for considerable care when negotiating left-hand bends with an empty passenger's seat ; and this same lack of cwts. could also be annoying if one forgot the exhaust-valve lifter before jumping heartily on the kick-starter, which was situated on the off-side just behind the driver's seat and was the sole means provided for getting the engine started ! The only other fault I had to find with this car was the lack of a reverse gear ; and in this respect I must confess the lightness of the machine was a blessing.

My next car was a 1934 Morgan sports two-seater. After a few months of motoring with the J.M.B. I had begun to hanker after something with rather more performance ; and the new car, with its 1,100 c.c. o.h.v. water-cooled " V "-twin J.A.P. engine, certainly gave me what I wanted in that respect. It was well-finished and equipped—two great assets being a reliable self-starter and a reverse gear—and when the engine (which was unfortunately rather temperamental) could be persuaded to hold its tune, capable of putting up a really potent performance. The close ratio gearbox was a joy to handle, and the getaway and acceleration were most satisfying. The Morgan would cruise very comfortably at 50-60 m.p.h. and flat out speeds of over 80 m.p.h. were well within reach ; and the car was, taking things all in all, very pleasant to drive.

After the Morgan came a 1935 " P " Type two-seater M.G. Midget. I started competition motoring with this car ; and the engine, which always responded nobly to all the tuning and minor modifications to which it was subjected, did excellent work in a number of reliability trials, sprint events, a hundred mile race on the sand at Southport and the 1935 R.A.C. Rally—my co-driver in this event, by the way, was the late Luis Fontes, who was destined to become famous in later days as a racing motorist and airman. The M.G., after a fair amount of attention and tuning, finally developed a very useful performance for an unblown " 850 " ; a carefully-adjusted clutch-stop did much to speed up the changes through the rather annoyingly wide-ratio gearbox, and this considerably improved the getaway and acceleration, while the flat-out speed when the car was running stripped was a genuine 95 m.p.h.

Towards the end of this year I got rid of the Midget ; and while I was looking round for another car, I discovered and acquired the famous " Chitty-Chitty-Bang-Bang." For a time I toyed with the pleasing idea of overhauling " Chitty " and using her on the road ; but the problems of tax and insurance, together with the knowledge that a great deal of time and a not inconsiderable amount of money would have to be spent in getting her anywhere near safe for ordinary everyday motoring on crowded roads, knowledge which, I may add, was very forcibly thrust upon me while driving the monster down from London to Reading (!) all combined to put paid to the project. So " Chitty," although I finally did rebuild her and get her into very fair running order, spent a number of years in honourable retirement in my garage, emerging once in a while to be started up and motored round a field or up and down a private drive—and, upon one memorable occasion, to display the full majesty of her vast 23-litre engine (no bonnet, of course !) and impressive rear driving-sprockets and chains by touring round the course at a sprint meeting to the accompaniment of a thunderous roar and flashes of flame from six stub exhausts.

As I had finally and regretfully decided that it was going to be impossible to run " Chitty " on the road, and as I had parted with the M.G., I found myself once more looking for a car ; and, for my fifth motor, I chose a 1935 Austin " Ten " Abbey Special. Like my previous cars, this was an open two-seater, but, although it had a neat body and was pleasant enough to drive, I found its performance disappointing.

I was, therefore, not sorry to part with the Austin, and, in its stead, I acquired an Oldsmobile. This make had, at that time, just been reintroduced into the country, and mine, which was a 26-h.p. two-seater Drop-Head Coupe, was one of the first of its type to be put on the road over here. It was quite a typical example of American car design, rather vulgar to look upon, but comfortable and well-equipped—with a car-radio and sundry other gadgets—and it was certainly capable of a useful performance. The getaway and acceleration were very satisfactory, and one could get a speedometer reading of 90 m.p.h. almost anywhere ; but I never really resigned myself to the " super soft " springing—independent coil springs in front—and the inevitable rolling and swaying when cornering always seemed rather unpleasant. In spite of this, however, the car served me very well and provided me with a long spell of trouble-free motoring.

I had always been secretly rather disgusted with myself for going " soft " with the purchase of what my hardier friends were prone to refer to scornfully as " that Yankee Gin Palace of yours "—one of the worst offenders in this respect was my friend, and your correspondent, Sir Clive Edwards, Bart. !—and so, although I still retained the Oldsmobile, I got hold of a very amusing little car to play about with in spare moments. This was a very special Austin Seven ; the frame had, by some clever juggling, been completely underslung front and rear and an exceptionally low-built and sketchy aluminium body had been fitted. This body was officially a two-seater, but I don't think that two people could ever have managed to get into it at the same time—I certainly never carried a passenger while I had the car. The engine was a " hotted up " standard unit fitted with a special exhaust manifold and twin carburetters. It produced plenty of power, and, thanks to that and a very nice gearbox, the little car had an excellent performance—I have no figures to hand, but I can remember fierce acceleration and a top speed approaching 80 m.p.h. The Austin was very amusing to drive and, considering the ultra-low centre of gravity and lack of weight, quite steady on the road—but unfortunately I am very tall ; and, in spite of having the pedals cranked and the bottom half of the steering-wheel cut away, I always began to suffer agonies of cramp after about twenty minutes in the driving-seat. So, after a few months, the Austin was sold—I hope to a more reasonably-sized owner—and the Oldsmobile went soon afterwards.

A 4½-litre " 100 m.p.h." Invicta with an open four-seater body was my next buy. In spite of what has been said about this particular model—Forrest Lycett, I observe, even goes to the lengths of referring to his as a " great schism " !—I had a great deal of very enjoyable motoring out of mine. The engine when properly in tune gave out a more than adequate supply of b.h.p. (although I must admit that reliability was not one of its more conspicuous qualities) and the car was undeniably fast — 115 m.p.h. when stripped—in addition to being possessed of really savage acceleration. Tyres and plugs had rather a thin time, and a decidedly special technique was called for when cornering, especially on a wet surface ; but for all that the car was great fun to drive, and generally performed well in competition—in particular, I can remember one very enjoyable " Mountain " race—and on the road.

I followed the Invicta with a car that is still in my possession to-day—although the h.p. tax and petrol rationing have unfortunately kept it behind the garage doors for several months now—a " Speed-

CARS I HAVE OWNED—continued

Six" Bentley. This car has always been, and will always remain, my own idea of perfection in everyday motoring. It has undergone numerous modifications and alterations during the time I have owned it, and now, with a specially shortened chassis and a beautifully-finished open two/three-seater body, gives me everything I ask in the way of performance, reliability and comfort. If I really got down to a description of the Bentley I'm afraid I should go on enthusing for pages without number, so I will content myself with saying that, if anyone should happen to want more details of the car and its history, information concerning it may be found in MOTOR SPORT for the month of May, 1939.

In the early days of the "Speed-Six" I had a rather bad crash with it in a speed trial and work of repairing the damage to the car looked like taking a long time. Accordingly, I bought what proved to be a very interesting car—a 1936 Squire open two-seater powered by a "blown" 1½-litre four-cylinder engine and equipped with an E.N.V. pre-selector gearbox. This car had a very lively performance, it was delightful to drive, and the road-holding and brakes were excellent. But the body provided little space for a tall driver, and luggage accommodation was also very limited, so, shortly after the Bentley's return to the road, the Squire departed.

During the latter months of 1938 I went to work as a farm pupil, and I felt that the "Speed-Six," which at that time had just received its new body, would not be improved by bouncing about over fields and cart-tracks—and probably having to spend nights in the company of fowls or pigs! So the Bentley was left at home, to be used when I got away for week-ends, and I obtained a very ancient 12-h.p. Morris saloon for the princely sum of £5 10s. This veteran, in spite of being almost unbelievably noisy and distinctly odd to look at, did yeoman work for me; it was remarkably reliable and quite pleasant to drive, although its undeniably low sense of humour, which used to manifest itself most particularly on frosty mornings, led me to christen it "Aristophanes"!

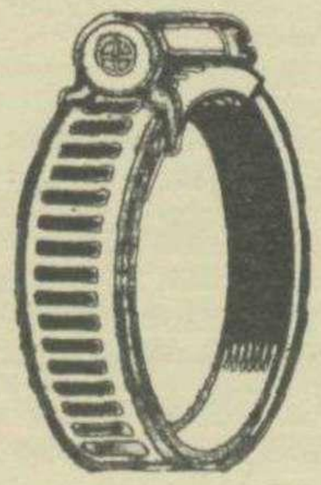
"Aristophanes" lasted until I happened to catch sight of an old 3-litre "Blue Label" Bentley tucked away in a roadside garage at which I had pulled up for petrol. There was nothing for it. I parted with the Morris and a cheque, and became the owner of the 3-litre. It was a grand old long-chassis open four-seater tourer of 1925 vintage, and, after a much-needed overhaul and the fitting of a large Zenith carburetter in place of the original 5-Jet Smith, performed very well indeed. It handled satisfactorily and the road-holding and brakes were good, while the exhaust note can only be described as superb.

I ran the 3-litre as a companion to the "Speed-Six" for quite a time after leaving the farm, and had plenty of good motoring with it. Then I decided to try my hand at building a single-seater "Special" for sprint events and hill-climbs, and the old Bentley 3-litre went in part-exchange for a partially-completed chassis. The Special was coming along very well until the war put an end to its development. It consists of a 2-litre, 6-cylinder A.C. engine (year: 1927) blown by a chain-driven concentric vane-type Zoller supercharger, this power-unit being mounted in a frame consisting of the front end of a Lea-Francis chassis, with special outrigger springs and a "Leaf" front axle, and the back half of an A.C. chassis which carries a "Leaf" rear axle on its original springs. The power is transmitted to the rear axle through a dry plate clutch and a pre-selector gearbox. The car's radiator started life in an Austin Seven, and the original "Leaf" steering-gear has been retained, although the box has been modified in order to bring the wheel to a central position. The car, although it was still in a rather rough-and-ready condition and without a body, ran in one event before the war—a hill-climb at Burghfield, organized by the S.O.D.C. and the Frazer-Nash and B.M.W. C.C.—in June, 1939. It put up a very satisfactory show, but now it has joined the "Speed-Six" in retirement until the end of the war.

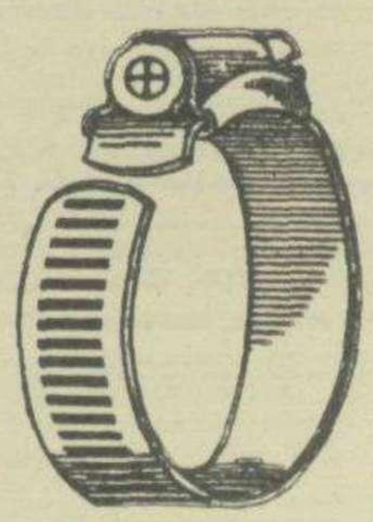
Thanks to Adolf and the rest of his insanitary compatriots, I eke out my meagre petrol ration month by month in a small saloon, but I must admit I do enjoy the limited motoring I get with my present car. It is a 1937 Ford "Ten" De Luxe, and I can honestly say that I have nothing but praise for its behaviour up to date. The engine develops a remarkable amount of power, runs very smoothly and is not greedy on oil or petrol; and the car is comfortable with plenty of leg and head room (this is important as far as I'm concerned), while the suspension, brakes and road-holding permit pleasantly rapid progress at all times. In fact, I'm almost grateful to Hitler; at least he has been the means of finding me a good small car—indirectly, it's true!

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READERS DISCUSS THE STRACHAN STIR-UP

[In the April issue, R. C. S. Strachan suggested that the sports car is doomed to disappear from the new-car market. Mr. Lowrey's reaction to this theory was published in the correspondence pages last month and three more replies follow—incidentally, the views expressed all take different angles and would seem to offer convincing collective disposal of at least the fundamentals of Strachan's argument.—Ed.]

Douglas Tubbs Agrees—Unless Sports Cars Become Lighter and Faster

WHEN Mr. Strachan asks: "Is the Sports Car Doomed?" he is in reality asking "Why are modern sports cars so heavy?" Ever since the great days of 1929, when sports cars WERE what they set out to be, the British sports model has been getting heavier and heavier. As soon as our excellent little engines are developed to give more power, the body-folk insist on surrounding them with touring bodies of bastard Le Mans cut. Not Le Mans bodies like the excellent cars that have run there in the last few years, such as the saloon Adlers, B.M.W's, Bugattis and Talbots; but corpulent copies of the old Bentley cars of ten years ago.

Now the Vintage tradition is an excellent thing; the Bentley victories at Le Mans are the enduring proof that, ten years ago, the British sports model was indeed the best in the world. In those happy days you could drive almost any British sports model on Continental roads and be sure that no foreign machine of the same size could beat you in a dust-up.

The rot set in when the slump of 1931 prevented the Bentley company going on racing. The public takes a long time to learn a lesson, and a long time to forget a thing when once learnt. The old-fashioned concept that a racing car had to have a pointed tail and an outside exhaust-pipe had at last yielded, by the end of our "Bentley Boys" epoch, in favour of "racers" having four-seater bodies, stone-guards everywhere, and cut-away doors.

What a blessing that was to the Trade! Anyone with a fairly lively chassis could clap on a nice four-seater body with fold-flat screen, and the proud purchaser had only to buy half a hundredweight of assorted sports extras from Mr. Derrington to have a really-truly sports car—at any rate, the passengers got some nice fresh air. Happily, that was not the whole story. The M.G. Magnas and Wolseley Hornets were fairly light in weight, and their engines could be tuned and modified until the original seventy-mile-an-hour car was doing ninety or more. From that time on it has been a race between the engine and the body. The Le Mans type body is so much like a touring car's body, that little by little the public has insisted upon having more and more of a touring car's comfort and weather-protection, until each extra horse-power found by the engine research people goes, not to making the car faster, but is mortgaged in advance to the coach-builder. Many of the machines sold as "sports models" to-day are actually heavier than touring cars of the same engine-size. On the Continent, the trend has been in a different direction. The iron of the old-type Le Mans car had not entered into the soul. When the British broke themselves of the race-winning habit, the French or the Italians and the Germans did not pack up and go home; winning speeds have shown a steady rise. Moreover, not only have foreign sports and racing cars not got heavier, but, on the contrary, touring cars have steadily got lighter and availed themselves of what racing teaches about steering, holding the road, and streamlining. Unhappily for us, our great days came before the Automobile Club de l'Ouest threw away the old four-seater tourer regulations and allowed the modern aerodynamic body to give the sports-racing car something for nothing.

The years roll on, and disclose the British Patriot still rolling along in his ersatz-Vintage-Le Mans-sports car, which gets heavier and wider every season. Several of our most famous makes have even had to fit larger engines so as to satisfy customers that this year's model really IS faster than last season's. Some have merely tuned-up the speedometer. . . .

It really is incomprehensible! Here are we with horse-power taxed at twenty-five bob a time, and every gallon of petrol giving ninepence to the Exchequer, and yet we STILL drive square-ended anachronisms. It isn't that we *can't* build streamlined cars; even without the example of the little 1,100 cc. Fiat, which gives 40 m.p.g. at 60 miles an hour, we have the Gardner M.G. and Embiricos' "4¼" Bentley to learn from if we wish. Streamlining gives "something for nothing," as you can prove, in a purely negative way, by sticking your hand out of the window at forty miles an hour or less. A properly streamlined motor-car will go faster, use less juice, and pull a higher gear than the olde worlde sort; yet, because we did not use streamlined cars in the heroic age of British racing, the roads are full of the oblong anomalies which we call "sports cars."

Now I am quite aware that all this is heresy. Notwithstanding I am going on to throw one more brickbat before I duck. Our sports cars, that is to say our M.Gs., our Singers and the other small open cars, have not got the way they are through any fault of their own, but have been steadily "put upon" by the trials boys. The manufacturer of small sports cars has to contend with numbers of keen trials-drivers, some old hands at "mud-plugging," but many driving in their first competitive event, all eager to make some sort of showing. How is it to be done?

Two very successful trials cars spring at once to mind: let us take them, if you will, in chronological order. The first is the Frazer-Nash. Here we have a sporting machine, with no concessions to the elderly relative or to the maiden who signs letters "Sedan Fairy." Here was a car that the expert could win "premier" after "premier" with, despite a bottom gear of about 11 to 1 or so. A powerful engine, giving its horses at low speeds, body very light, solid back axle, and high-geared steering, were the reasons. Now for the trials driver's choice six or seven years later: The body has become quite luxurious, giving, despite advances in metallurgical knowledge, a hard task to the small motor. However, there is one way by which even the heaviest vehicle can be got to the top of the steepest hill; the method made familiar to winter sportists by the funicular railway. This is the method adopted for modern small sports cars. Willing little engines, yielding most of their power only when turning really fast, gave scope for bottom gears of 19 to 1 and over; the place of the funicular's cogwheels was taken by knobbly tyres (the use of which on a Frazer Nash used to be social suicide) and, having locked the differential, the modern slime-stormer was ready for almost anything. Anything, that is, off the main roads. The mistake the manufacturers made, it seems to me, was in not catering for both their publics.

Well, there you have my moans.

Is it too much to hope that when our people start making motor-cars again, the vehicles catalogued as "sports cars" will be LIGHTER, FASTER, BETTER STREAMLINED, and HANDIER than anything we know at present, touring or sports, English or foreign? If that is asking too much, Mr. Strachan is quite right, the sports car IS doomed.

Denis S. Jenkinson says Vintage Restoration is the Answer

MUCH as I hate to, I can't help agreeing with Mr. Strachan, that the ideal of the sports car we believe in is out of date and dying. It is regretably true that the British conception of a sports car, *i.e.*, true vintage motors such as the "12/50" Alvis, 3-litre Bentley, "30/98" Vauxhall, etc., has practically disappeared from the new-car market, and is only being upheld by Alta, Frazer-Nash, and H.R.G.,each of which, as Mr. Strachan states, are expensive. The reason, I think, is obvious — mass-production. These three cars are all essentially hand-made and therefore cannot attempt to compete with, say, M.G., Morgan, or S.S. as far as price is concerned; though as far as value for money is concerned, give me the hand-built job every time.

If the manufacturer attempted to *mass-produce* a "vintage type" car it would be a failure, for that means making use of pressings and castings which can be turned out by a machine in their hundreds in next to no time, and a vintage type just cannot be made that way.

The twentieth century demands progress and, in the car world, progress means increased performance, which is obtained in two ways; either by streamlining or by getting more power from a given size of engine. Naturally, the manufacturer prefers the cheaper course, namely, streamlining. Here, I think, we have the whole crux of the matter, as to why the vintage car has disappeared, with the aforementioned exceptions, from the new-car market; it is not a case of lack of support. It really boils down to a question of how

READERS DISCUSS THE STRACHAN STIR-UP—continued

much money a manufacturer is prepared to spend on improving the performance of his cars.

As an example of the modern trend, take the Bentley "Corniche," capable of 120 m.p.h., which is obtained largely due to improved streamlining, and, on the other hand, the Alta can give the same speed, purely by improved engine-design and power-output, and with no attempt at streamlining by means of masses of tinware. Imagine an Alta with fully-streamlined shell (Sacrilege!). Performance would certainly be exciting, but . . . .

Either we, that is the lovers of the vintage motor, must (*a*) give way to the modern trend and fall in with the horrible overbodied tin masses that are being presented to us as sports cars; (*b*) continue to pay high prices for a hand-built "vintage-type" modern; (*c*) persuade manufacturers to study engine-power more than aerodynamics and give us Continental performance with "vintage" lines; or (*d*) we must carry on as we have done in the past decade, and restore the true vintage motor whenever possible.

I am all in favour of the last myself, for there are plenty of vintage cars that have been restored and had fair sums of money spent on them, that will give an equal performance to many modern sports cars; the numerous Bentleys which can top the 100 m.p.h. mark are ample proof of that. Admittedly, one cannot do one's hundred per in such comfort, or with interior heating and the radio on, but then who wants to? No true vintagent worries about things like that, and if your rebuilt performance motor needs manhandling at high speed, and gearchange requires both hands instead of the little finger, who cares? These are the things that make real motoring the joy it is. The true enthusiast, whether he runs a "30/98" or a "Chummy," does so for the sheer joy of motoring, not to be able to brag that he touched 100 m.p.h. Where is the joy in doing high speeds in one of the modern mechanical contrivances that closely resemble one's front living-room, compared with that of doing the same speed in a genuine vintage motor, in which one has to work, as distinct from indulging in the knob-pulling and button-pushing of the modern. Recently I had a good example of this, for I did a journey of 25 miles in the comfort of the rear seat of a modern Bentley saloon, cruising in silence at 80 m.p.h., with only the rev.-counter showing around 3,500 to indicate that there was machinery under the bonnet. The return journey was accomplished as passenger in a "Brooklands" Riley, sitting sideways with one arm over the tail, and with eight stone of humanity on my lap, all in a cockpit little more than 3 ft. wide. Cruising at 65 m.p.h., deafened by the roar of the wind, plus the healthy sound of 1,100 c.c. giving of their best, mingled with a genuine exhaust note and the whine from a straight-tooth rear-axle, made the return journey a hundred times more enjoyable than the faster speed of the modern car. Everyone to his tastes, I suppose. . . .

I may be spurned by society for perpetually smelling of petrol and "R," and my trousers may be covered in oil and never have any creases in them, and my cars may be quietly shooed round to the back entrance of respectable dwelling-houses, and not even tolerated near a high-class hotel, but as long as the motor is vintage and can be classed as a thoroughbred, I shall never worry.

It's up to the true enthusiast to make sure that the vintage sports car doesn't die. If the manufacturers won't give us "vintage types" we must rebuild our own and the lucky ones can even build theirs from scratch. Where's the money coming from? Yes, that is rather a problem at the moment, I admit, but I'm certain it's not unsurpassable.

The present time is a very important phase in this vintage car question, for after the war there will be even fewer true sports cars left and we must do all we can now to preserve all the vintage cars which we can find.

K. N. Hutchison asks "Why Argue?" —Sees a use for Utility, Sports, Vintage, American and Continental Cars

THERE have been many interesting discussions upon the comparative merits and otherwise of the Vintage versus the American car and Continental models versus British cars, etc., etc., and it has not been unnatural for MOTOR SPORT to emphasize the outstanding features of the sports car as against the more family-type of car.

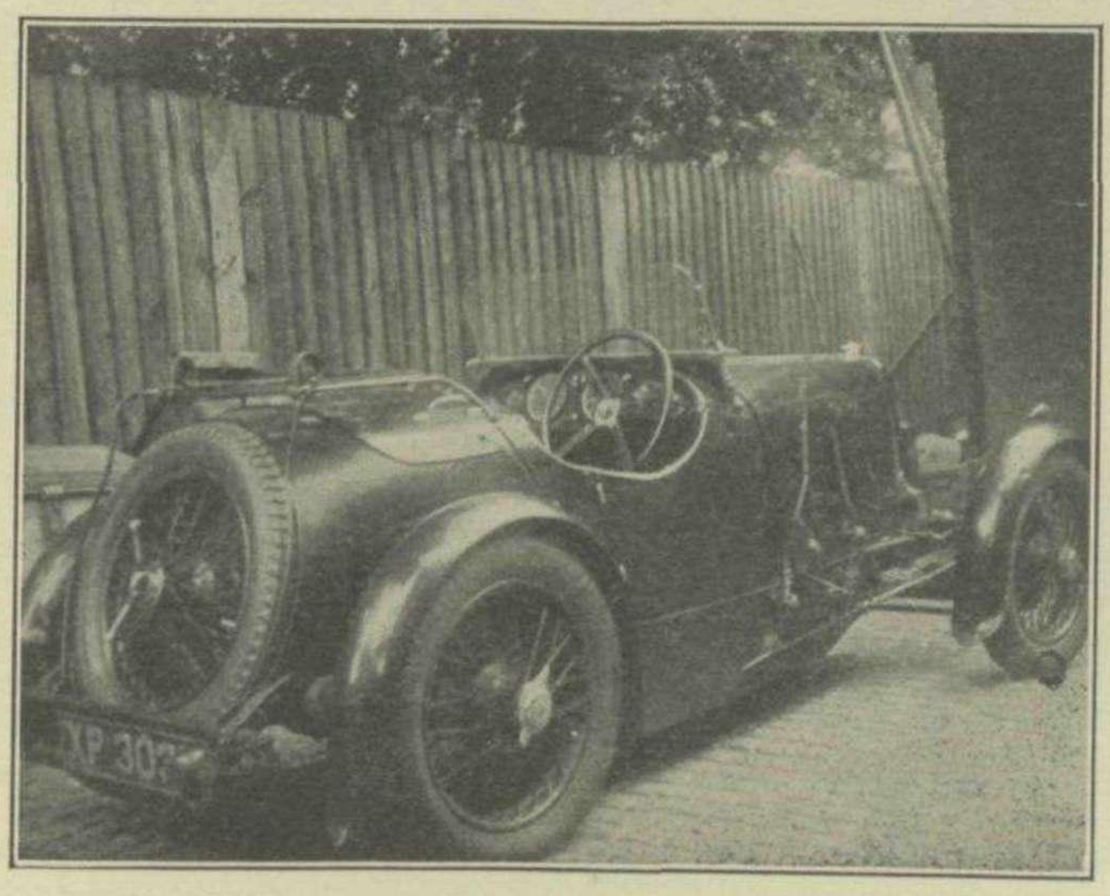
Let us, therefore, try and get back to the basic cause of a state of affairs that seems to reflect badly on the British utility car and understand why it compares so (apparently) unfavourably with its American, vintage and Continental rivals. Perhaps under investigation and bearing in mind the peculiar conditions under which British cars operate and exist it may be shown that they do not compare so badly after all.

Firstly, I think one should appreciate that the whole design, development and existence of British motoring operate under a perfect hell of a handicap—to wit, an excessive taxation in the form of a tax on the horse-power of the machine used.

This evil spectre has a finger in every motoring pie and influences almost to disaster both manufacturer and consumer alike. The manufacturer is forced to make the smallest-engined car he can commensurate with the largest body to satisfy his customers because they, poor souls, already taxed almost out of existence, wish to be able to get the most use out of their machines without having to pay about £1 a week for the rather doubtful privilege of what amounts to "permission to use their cars on the King's highway, subject to running costs and restrictions *ad lib.*"

The result is a machine that is grossly over-bodied, far too heavy, under-tyred and with an engine that, game though these small engines are, would not pull the skin off a hot rice-pudding. Moreover, there is no financial margin left over for any refinements in constructional design such as independent suspension, front-wheel drive, overdrives, etc., etc., because John Citizen, who in the main knows nothing of what a thoroughbred machine can be like and cares still less, prefers such refinements as the manufacturer *can* afford, to consist of silk blinds, door-pulls, ash-trays, cubby-holes and what-nots. In the main, I think the average small English family car (we are not considering sports models) does its job extremely well, and if one accepts the fact that it cannot give either American or vintage performance, the machine will nearly always give jolly good value for money in a dull but "plodding" sort of way.

Anyway, it is very unlikely that the British Government will ever substantially reduce motor taxation (one will probably have to pay to walk after this war is over!) and therefore I feel that the general character of the small British family car will probably remain very much as it is now for some time to come. Also, there



Denis S. Jenkinson wants to save the Vintage sports cars and restore them—here is an excellent example: one of the rare 16-valve twin-cam. Aston-Martins

READERS DISCUSS THE STRACHAN STIR-UP—continued

is no getting away from the fact that its peculiar character seems to suit about 90 per cent. of the motor-owning population of the British Isles.

When it comes to Continental cars, I think it is only fair to remind readers that most writers who have extolled the virtues of the " foreigners " have, oddly enough, selected the outstanding Continentals for their comparisons—*i.e.*, the Lancia, B.M.W. and Fiat—all of which are much more expensive than the average English family " barouche." It is worth bearing in mind that there is a mighty lot of cheap rubbish produced from the Continental factories as well—to wit, the Opel, Hanomag, D.K.W. and small Mercedes models. These will not compare at all favourably with the British Austin, Morris, Wolseley, Ford, etc., either in performance, finish, reliability or quality of workmanship and design. The expensive types mentioned above certainly perform better because in all cases they have a good power-to-weight ratio, and modern features such as independent suspension, etc.; also they are larger engined and more expensive than the average British car such as we are discussing. These features naturally make them sporting machines in spite of their having been designed as family cars, and this in turn leads to their being driven in a fairly hard way, by English owners, at any rate.

What such cars—driven as they invite being handled—would be like in 40 or 50 thousand miles I do not know but, personally, I would rather buy a third-hand British car than a third-hand Continental one.

When you turn to the vintage front I do not really think that these bear comparison with anything. This is not meant rudely, because the vintage " stars " such as 3-litre Bentley, " 30/98 " Vauxhall, " 12/50 " Alvis, Frazer-Nash, etc., were, in their day, representative of the best that money could buy in their respective classes. Being almost hand-made in small numbers, they were all very expensive, and because of their cost they were made well and of the best " ingredients."

For anyone who does not mind a bit of discomfort and occasionally dirtying his hands, a £30 or £40 " vintage " plus £100 for overhauls and modifications is probably the best motor-car investment going when translated into terms of cost in relation to performance plus wearing qualities.

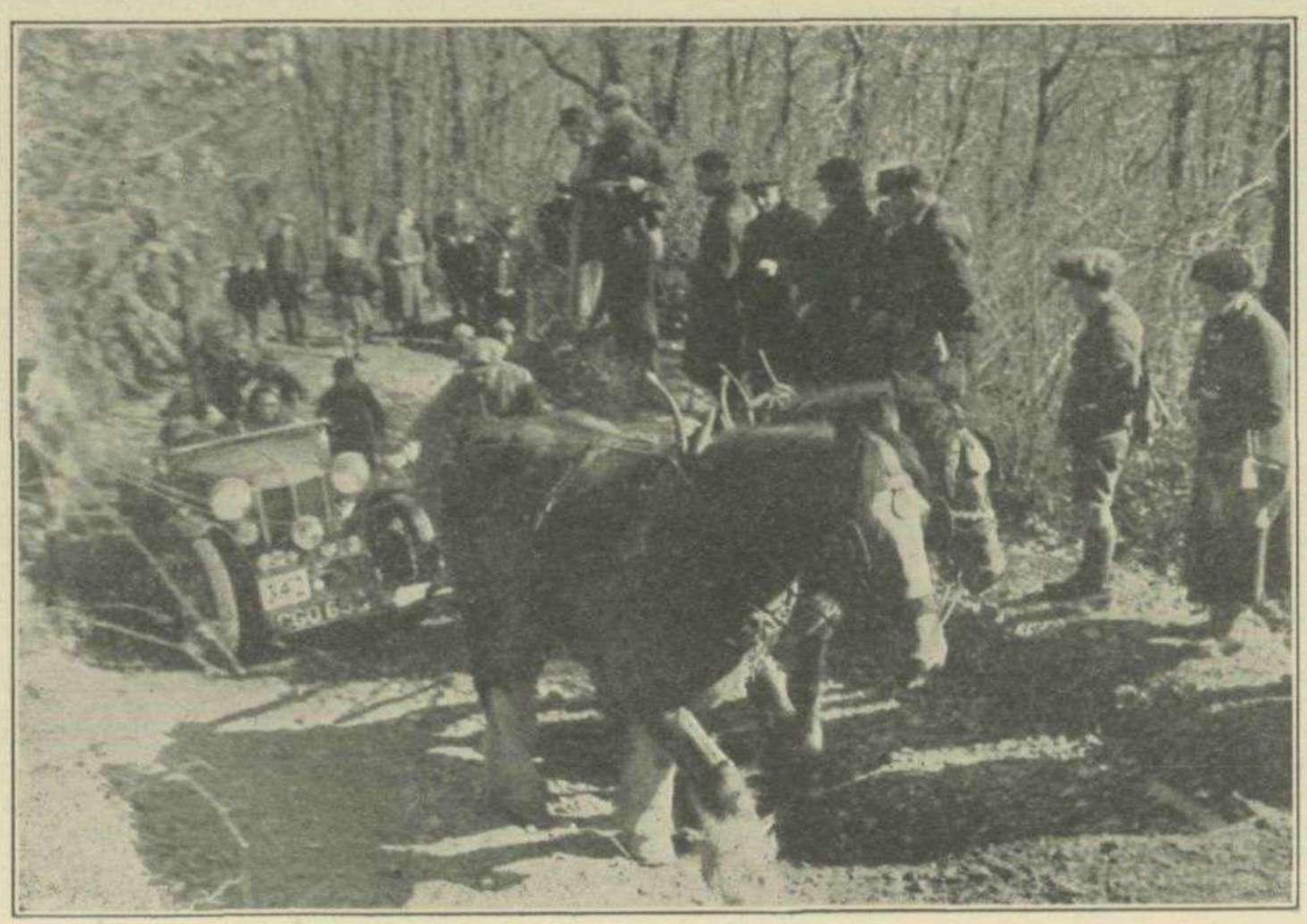
But you cannot compare cars that went out of production ten or more years ago with something we have with us to-day. Price and public requirements to-day are quite different.

It is when you analyse the American development that you come nearest to a motor-car serving its owner purely as a utility machine. Let us disregard the engineering-minded motoring enthusiast for a moment. We are agreed, as enthusiasts, that 90 per cent. of the English motorists on the roads to-day know little or nothing about the mechanical design part of their machines, and I expect the proportion of such motorists in America is even higher. After all, it is quite natural that if a man cannot appreciate a fine change-down at peak r.p.m., or a fast open corner taken at a speed at which the rear wheels just begin to edge out, then he will never indulge in such experiences. It follows that if he does not do such things then he does not require such refinements as i.f.s., or beautifully-made gearboxes with four speeds in them.

Add to these psychological aspects the more material facts that his Government does not bleed him white to tax his car (a few dollars a year will cover any h.p. in the U.S.A.) that apparently most of the world's petrol supply is on his doorstep and retails at about 8d. per gallon, and that his country's motor manufacturers, not being handicapped by high car taxation, are not continually trying to get a quart out of a pint pot, and have a huge market of potential car-owners, and there you have the reason why all American cars are of large nominal horse-power. This large horse-power allows for large and roomy bodies and excellent performance on the straightways (which constitute the majority of American roads) and good acceleration. When you reach the state of mass-production enjoyed by the American car manufacturer, it hardly costs any more to make a 30-h.p. engine than it does to make an 8-h.p. one, and obviously the low purchase price and running costs enjoyed by American motorists enable them to select the large-engined car as their standard of motoring instead of the small one.

There have been several attempts to introduce the " baby " car to the Americans, but so far all have failed, as well they might, because who would want to drive about in an 8-flea powered sardine-tin when it costs hardly any more to own a Chevrolet, Dodge, small Buick, or Ford ? Naturally, all these desirable features of American motoring attract huge numbers of would-be motorists—all buying and using their machines entirely as hacks. Service stations abound and all and sundry use them as such. These conditions create a class of user who knows nothing and does not want to know anything about his machine—probably half of them never even open their cars' bonnets. If the car gets dirty—a dollar wash ; if it squeaks—a dollar grease-up, and if something breaks—a few dollarsworth of replacement parts. To cope with this horde of uninitiated customers, the American manufacturers have developed a very wonderful machine—almost fool-proof and eminently reliable, but its very development has caused it to lack one thing—personality. (I don't mean the kind of personality that skittishly takes you backwards through a

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" . . . There is one way by which even the heaviest vehicle can be got to the top of the steepest hill "

IN DEFENCE OF THE SMALL SPORTS CAR

[A contributor recently suggested that American automobiles and Vintage motors were superior to our small sports cars. V. H. Tuson disagrees and here states the small car's case. How entitled he is to do so all will know who read his recent article on "Tuning the Fiat."—Ed.]

A GREAT deal of head-hanging seems to have occurred during the last two years on the part of sports car owners because they feel they are being done down by some of their larger brethren in touring trim or saloon form. Therefore, let us consider the facts in their true light.

First of all, consider the asset side. The average sports car in the under-1500 c.c. class provides good road-holding, braking, steering, comfort, smoothness and very reasonable weather-protection. The first three qualities will be superior to those of touring versions taken on the average. So far so good, but we now come to the main question and root of all the trouble —performance.

Performance is dependent on three factors: weight, wind-resistance and b.h.p., and we will consider the last-named first.

Now in this country the average owner wants reasonable upkeep costs, in which I include tax (and, therefore, insurance), petrol consumption and general items, or in other words he craves an engine-capacity of under 1,500 c.c.

In order to enjoy this economy we must be content with around 34 b.h.p. per litre. You will probably ask why, when we hear of figures like 130 per litre being obtained, and the answer is covered by two reasons: (*a*) you want your car to have a reasonable first-cost and (*b*) you want it to be reliable.

The sports car manufacturer is in business, one may reasonably assume, with the idea of making money, and you who purchase his car want some sort of guarantee. It would not cost in production very much more to provide 45 b.h.p. per litre, but that output in wrong hands (not yours or mine, of course !) would ruin the company's finances in a very short time.

I know a good deal of the inner workings of two sports car firms and you would be astonished at what some people can do. Unfortunately, a car must have gears, and whilst third gear gives a deal of scope, the more resourceful owners find that an engine can be ruined in a much shorter time by employing second or even first gear unwisely !

If an attempt is made to cater for the "7,500 in second, old boy" type of driver, then the cost is going sky-high, and unfortunately the manufacturer has got to consider the worst.

We must therefore be content with our 34 b.h.p.-per-litre standard, which, incidentally, keeps petrol consumption within reason.

Next we come to the question of weight, and now I am on your side 100 per cent. *We must have something around* 10 *cwt.-per-litre*. Morgan 4/4 and H.R.G. approach this figure and the "1100" Fiat chassis weighs under 9 cwt. A 10 cwt. car of 38-51 b.h.p. will have decidedly useful acceleration and, coupled with a useful gearbox, will deal very satisfactorily with any big Yank or other large h.p. utility vehicle.

Finally, we come to the question of wind-resistance, or in other words, speed. Here I will quote that rather remarkable car, the streamlined "1100" Fiat saloon (owner forward, please). These cars, with under 40 b.h.p. output, can get very, very close to 90 m.p.h. and the bodies, although streamlined, are not nearly as small as the equivalent size sports two or four-seater. They were not produced in any large quantity and as a result, cost some £170 more than the standard article.

A two-seater having a similar performance would also have come over except for the war (very fractionally slower, if anything, strangely enough, but having very good equipment and comfort and being in no sense a "racer").

In production, I cannot see that it should cost very much more than those bodies we are more accustomed to. There are no reasonably-priced utility cars that will do 90 m.p.h. in production form, and I will back this statement on the fact that I know of a big Yank on which pounds and pounds were spent trying to get 100 m.p.h. and which finally produced about 94 m.p.h. In another instance there was a very small racing two-seater produced which cost, I believe, over £800 and did about 110 m.p.h.

Perhaps I have wandered into the future, but it will all help to explain the latter part of this article.

We will, therefore, return to the present and consider why now and again you find a large Yank on your tail. You have both spent £250. The owner of the Yank has bought about 4 litres of engine, giving about 85 b.h.p., together with 32 cwt. of motor-car and possibly twice as much wind-resistance.

You have, say, 1,100 c.c. and 38 b.h.p. and 17 to 18 cwt. of car with half the wind-resistance.

The "1100" is, therefore, at a disadvantage on a power-weight basis, but you can manage to keep the Yank off with a more useful gearbox. On maximum speed there is not much in it. On the swerves you have him cold, and if you both have to stop very quickly I would sooner be in the "1100."

Still, you say, he can do very nearly all I can in more comfort at the same cost and in something that is not a sports car. But can he ?

	30 *h.p.* *Yank*	"1100" *Sports Car*
	£ s. d.	£ s. d.
	30 h.p.	9 h.p.
Tax at 15s. ...	22 10 0	6 15 0
Insurance ...	18 0 0	11 0 0
Petrol at 1s. 6d. per gallon ...	80 0 0	50 0 0
Tyres	30 0 0	12 10 0
	£150 10 0	£80 5 0

You have £70 to play with in 20,000 miles, so you can either buy a supercharger or do some fairly healthy tuning, sufficient to deal with Mr. U.S.A. Yank owners will then say that repairs will be high, but so will theirs if they try and keep up with you on British roads.

When you try to compare our under 1,500 c.c. cars with what may be termed a veteran sports car, the whole issue becomes very complicated, on the score of cost and upkeep. If you are lucky it is possible to get all the performance and reliability desired at a comparatively low figure, but one cannot draw a comparison between a £1,000 car and a £250 car that are both brought to same market-value by age.

The veteran will undoubtedly have assets given it by first cost, but it is almost sure to have some drawbacks as well, so the decision becomes a matter of personal choice. Comparisons are so often made between two cars of vastly different price, which is, of course, absurd, and in very many cases it would be found that if the cheaper of the two were purchased and the difference in price expended on it a superior all-round performance could be eventually obtained, coupled with other refinements which the more expensive but out-of-date car never possessed.

Finally, getting down to size for size and the question of sports cars versus touring cars of the same make, it seems that it is on the question of speed that one most nearly approaches the other, and it would not surprise me if wind-tunnel tests did not in some cases favour even the saloon version. In view of the considerable increase in power required in proportion to greater speed obtained, the reason for what may be the small difference immediately becomes apparent.

If comparisons are made on my first cost plus running cost against performance basis, I think the small sports car has it every time.

Readers Discuss the Strachan Stir-up

(*Continued from page* 355)

hedge if a corner approaches too fast, but personality born of quality, design, racing, ancestry, tradition, etc., etc.) The Yank has no individuality of its own—they even all look alike nowadays—and that is probably the reason why they never have and never will appeal to the real enthusiast—you see, he just could not be proud to own a Yank.

And so, when all types are considered, I think that the only conclusion one can draw is that each type well serves the majority of its particular group or class of buying public and that no one type of car can be directly compared with another.

I suppose the ideal stable would contain one or more of each type, but as that is impossible for most of us, we can but continue to associate ourselves with the type that gives us, individually, the greatest pleasure.

Club News

750 CLUB

Attendance was as good as ever at the 750 Club's meeting at the Ashdown Park Hotel in May. This time members met for tea, and a brief communal run took place afterwards. Amongst those present were Secretary Hunter and Mrs. Hunter, with a borrowed Arrow Austin, just about to leave on war duties at a Far Place ; H. L. Biggs in his red Fiat 500; Fisher and Mrs. Fisher in a Raleigh tricycle ; Miss Carpenter and most of the Scuderia-of-the-something Elephant, in a very spiritedly-handled 1,100 c.c. saloon Fiat ; Gordon Woods in a really decrepit Swift-Ten drophead coupe, acquired from a soldier for 30s. to replace the Frazer-Nash, temporarily in dock ; H. L. Williams with his low-built Cozette-blown Austin-Special, complete with triple Cissy horn cluster beneath the bonnet ; Birkett with " Ulster " Austin and fantail ; Capt. Moon and his smart " Nippy " Austin Seven, Boddy, John Day and Ron Ambrose in a large Hillman box ; Henry and Mrs. Ashmore with their " 12/50 " Lea-Francis ; Frost, this time with his *unblown* " Ulster " Austin ; Childs's late-type Austin Seven two-seater ; and Capon, temporarily taking over Hunter's duties, in his Riley saloon. The " Bulletin " appears to have become a war casualty, but another meeting was scheduled at Blackwater for June 8th. The war subscription is 5s. per annum. Hon. Secretary : P. H. Hunter, 39, Warland Road, London, S.E.18.

WE HEAR . . . .

Speed Services at Blackwater had a blown 1¾-litre Alfa-Romeo with unusual and attractive bodywork in recently and own an American Moto-Scoota with a side valve Waco engine having the smallest carburetter and exhaust-pipe ever seen. Motoring in the Brooklands district, interesting " finds " have included a pre-1914 lowered sports Rolls-Royce that once ran in sprints, a modern Alfa-Romeo two-seater with alloy wheel-discs, and a garage owned by two enthusiasts who run a fine Delage saloon as a hack and possess quite a unique collection of old motor journals, and a 4½-litre Bentley saloon on A.F.S. work. Some of Dick Nash's veterans, we fear, suffered during a recent air-raid. At the " Plug and Spanner " garage Peck has stored his brother's " 19/100 " T.T. Austro-Daimler two-seater, which is said to make a meal of most 4½-litre Bentleys, two A.B.C. motor-cycles, and a nicely-preserved four-cylinder Powerplus-engined aluminium sports Frazer-Nash. He is rebuilding a sleeve-valve P and P motor-cycle of the spring-frame variety, and has contrived to set the compression ratio up from the original figure of about 3¼ to 1.

Some lucky person in the R.A.F. gets enough petrol to justify taxing an Isotta-Fraschini.

Percy Bradley is engaged on strenuous daily war-tasks, which include some very long-distance motoring, and Eric Vereker undertakes similar journeys, we believe, in an American automobile ; he still owns a few veterans, including the 1914 Stellite. At Farnborough, work on the Worthington twin o.h.c. Frazer-Nash has reached the carburetter - tuning stage, and Miss Carpenter has recently acquired a Frazer-Nash. At Cambridge a Bugatti Straight Eight is reported to be doing its 4,500 r.p.m. (50 m.p.h.) in second, 4,200 r.p.m. (64 m.p.h.) in third and 3,700 r.p.m. (just over 80) in top, and it may soon have a blower added. Anthony Heal is rumoured to have bought a " 12/60 " Alvis, Peter Clark does some 500 miles a week on business journeys in his big, gas-burning Delage, and Hanks motors a late model Type 40 Bugatti with genuine Jarvis body. Leslie Ballamy is mostly redesigning sewing-machines to assist the output of flying-hats for British pilots, but he has much of interest to the enthusiast at his Caterham works and is sending a specimen of his latest Ford independent suspension system to America as soon as the American Navy begins its patrols ! He is rebuilding an A.B.C. motor-cycle, as this is the only two-wheeler he cares to ride. Several Brough-Superiors, one solo, and a very early chaincase solo Sunbeam have been noticed in action ; also a remarkably well-kept 8.3 h.p. Renault touring-car and a Windsor tourer. A. C. Whincop is recovering from a nervous breakdown at Uxbridge Hospital, following flying crashes and other grim experiences. Mrs. Whincop is toiling seven days a week on aircraft production ; after the war the Shuttleworth " 2.3 " twin-cam G.P. Bugatti will be further tuned and the sports Type 43, which does 108 m.p.h. as it is, will be developed for Mrs. Whincop to handle for a year in sprints in order that, in her own words, she can get quite used to a G.P. gearbox (which this car has). Apart from the Bugattis, the Whincops have a delightful garage, a delightful cottage, a jolly bull-terrier and some beautifully-arranged and captioned photograph albums. Guerycoe, who was often to be seen driving a hack O.M. at Brooklands and who worked on W. B. Scott's and Shuttleworth's cars, has been discovered near at hand, and he has cheered up tremendously on being allowed to work in the Whincop stable. In Chertsey, the very red and polished Vauxhall fire-engine is reputed to really be a " 30/98." At the " Ely," on a bleak part of the Hartford Bridge Flats, are four veterans, the property of C. A. Smith, of the Veteran Car Club, comprising a 1908 Delaunay-Belleville landaulette with practically new tyres and two brand-new spares, a 1912 12-h.p. F.N. two-seater, an extremely early single-cylinder, rear-engined, two-belt Hurtu and a Locomobile steamer. The last three have been restored with great care and the utmost attention to detail, even the hue of the paint on the Hurtu's mudguards being as the original, while the Locomobile was built up in nine months from hundreds of pieces, the boiler tested to 250 lb./sq. in. and even the tassels round the immense cape cart hood were spaced correctly in accordance with a photograph —no blue-prints could be obtained. The F.N. was driven from Norfolk to its present home and reached 43 m.p.h. It had been owned by a parson and later by the R.A.F. Tubbs, who wishes to sell his Type 45 B.M.W. and acquire a second D.K.W. or Lancia " Aprilia," reports finding an ex-Gordon Watney " Ninety " Mercedes on a farm in Berkshire, while hot on the scent of " Chitty "—actually, it is pretty certain that " Chitty I " was broken up and " Chitty II " went to America in the " Queen Mary " immediately before the war. It now transpires that Speed Services' Sunbeam-engined Austro-Daimler is a " 19/100 "—so where is the beautiful twin o.h.c. 3-litre ex-Clive Dunfee Austro ? Cyril Peacock recently arrived at a breaker's in time to save a " 12/50 " Alvis chassis from which the body had just been torn ; he will do it up when time permits. G. F. Lomas, who wrote of Straker-Squires in the November 1940 issue, recently attempted to convert his Morris Eight tourer to steam and get the boiler in only to be let down over the engine, so all is now back as it was. It is a pity that the film " Waterloo Bridge," period around 1916, shows a quite modern Austin Twelve taxi in one scene, although a really period taxi and an almost-early-enough Rolls-Royce feature in other shots. Does anyone know of a shaft-drive Douglas " Endeavour " motor-cycle that is for sale ? A Singer " Porlock " two-seater has been seen at £15 in a breaker's. Breen has another perfect 3-litre Bentley and, they say, a touring G.N.

A SUMMER MEETING

It really looks as if a combined club gathering may take place soon. At all events, Rivers Fletcher, Chairman of the E.R.A. Club, Eric Giles, Hon. Sec. of the Bugatti Owners' Club, and Cecil Clutton, Hon. Press Secretary of the Vintage Sports Car Club, have held meetings to discuss the project. It is hoped to lead off with a week-end party, possibly terminating with a supper and film-show, somewhere west of London, followed by the establishment of a definite forgathering-centre in London. To save expense, announcements will be in the motoring press only. All power to the scheme !

GENERAL NOTES

The sum total of one's motoring is sadly down on that of peace-time, but what there is can be highly enjoyable. One

Continued on page 358

Letters from Readers

Sir,

It would be interesting to hear from any of your readers who have played about with the Type 40 Bugatti. My own (No. 40470, year 1929) purchased very much secondhand just before this war nonsense started—has proved the veritable "Molsheim Morris Cowley,' after the following work was carried out :—

Solid exhaust-valves were fitted, big end brasses *soldered* and riveted to rods. All bearings taken up. Camshaft ground on journals and new brasses fitted to camshaft box.

The block was treated to a regrind and Aerolite pistons.

A clutch-stop cunningly contrived with a disc bolted to gearbox shaft-flange and Ferodo pad on the clutch actuating-arm gives a silent engagement of first gear except from dead cold. The Autovac was scrapped in favour of an "Autopulse" pump ; I welded two stub inlet-pipes to a plate bolted direct to the block, and fitted two S.U. carburetters from a 14-h.p. M.G. after blocking up the water-flow holes to the old manifold. This conversion has much improved the general smoothness and given me 27 m.p.g. on "Cesspool," which seems to work all right provided the loud pedal is not depressed too suddenly. The car has a very good aluminium three-seater body by Jarvis and is being used for business hacking, H.G. duties, and an occasional all-too-short joy-blind. It is always ready and reliable.

My MOTOR SPORT is much appreciated these days. Congratulations.

I am, Yours etc.,

Theale. L. L. HANKS.

* * *

Sir,

I have recently come across a letter by Mr. Patrick Green, published in your February issue, in which he took exception to my remarks in my article, "Those Who Work and Those Who Don't," published in your November issue, as being unkind to Raymond Mays and that I had implied that Mays lacked motor-engineering knowledge or ability.

I do not usually care to engage in controversy in the Press, but must in this case take up my pen to reply, as apart from anything else, I have the privilege of counting Raymond Mays as one of the best friends I made during my few years' happy association with British motor racing, and also because some of your readers might have seen Mr. Green's letter but not my article, and last, but by no means least, my reply is in no way controversial.

I wish to state here and now that I did not in any way mean to imply that Raymond Mays lacked engineering ability or knowledge of cars. The whole and only point of the article was to contrast drivers who actually enjoyed the manual work on their cars with those who preferred to confine themselves to the art of driving. I did not mean to question their engineering knowledge in any way. If Mr. Green misunderstood me, as some others might have done, it must have been due to my own failure in expressing myself more clearly, for which I beg to tender my sincere apologies. As for my remarks about Mays's clean overalls, it was merely a friendly jest which I feel sure Mays would be the first to appreciate.

Lastly, although I have written some articles "extolling" my cousin, B. Bira, owing actually to the fact that the editors naturally wanted me to write upon something I knew about, it does not necessarily mean that I have not been fully aware of the undoubted gifts and ability of other drivers, and I hope that when my new book, "Life of Dick Seaman," sees daylight in the near future, this fact will be clearly demonstrated.

I am, Yours etc.,

CHULA OF THAILAND.

Rock,

Cornwall.

* * *

Sir,

I would like to congratulate you on maintaining the very high standard of pre-war MOTOR SPORT in these difficult times. Your "Cars I Have Owned" series I find of the greatest interest, but may I ask that you should at all costs prevent your correspondence columns from becoming the battle-ground between those two gentlemen who almost monopolise the space in your weekly contemporaries at the present time? Wonderful cars though the 8-litre Bentley and "3.3" Bugatti undoubtedly are, the unending and acrimonious flow of letters from their proud owners, each loudly trumpeting the virtues of his vehicle at the expense of the other, becomes more than irritating when carried to these extremes of childishness.

Having had more than 15,000 miles' experience with the Mercury, I agree with Mr. Gandhi that the acceleration and the petrol consumption of at least 20 m.p.g. are very good, but no more outstanding than the much cheaper Ford "V.8," and in addition any cross-breeze stronger than the gentlest zephyr makes the car undrivable at over 60 m.p.h. Mr. Gandhi's comparison of the S.S. and Bentley makes it obvious that his knowledge of the latter cannot be extensive or he would not have indulged in this unfortunate juxtaposition.

There is one car which is rarely mentioned and which, in its post-1937 Series II form, has no equal at under £1,500 for

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CLUB NEWS—continued from page 357

recent Sunday was occupied trying that entertaining car, the 4½-litre Invicta, fitted with a really practical utility body by G. E. Wallis & Co. Apart from the interest derived from handling such an interesting chassis, an unsuccessful search for a veteran, a fairly long tow of a quite fantastic Gwynne Eight coupe to its new home, and a run to visit a newly-married friend at his new abode at a far extremity of the Metropolis, were comfortably accomplished in the day. Then there was another rest-day spent just pottering around Surrey in the most economical car possible, never exceeding 40 m.p.h.—because the car just won't !—preparatory to running in a leisurely fashion through part of Middlesex and into Hampshire, where walking in first-rate country with trials hills on every side concluded the most beautiful day this year had yet produced. A contrast this to a search for "sections" in the same car on a pouring wet evening, after being enticed out to inspect a level quarter-mile plotted from an ordnance map with great diligence by two 100 per cent. enthusiasts, and it will be useful for future tests, but at the time provided depressing confirmation that the car in question certainly will not exceed 40 m.p.h. Worse, its "standing" time was over 40 secs. ! An unexpected few days' leave was opened very satisfactorily with a run in a 1,100 c.c. Singer-engined H.R.G., which felt definitely the "real thing," so that it was a bad business that the petrol position made driving restraint necessary. Although we did get 65 m.p.h. at 3,500 r.p.m. on the Watford By-Pass, after negotiation of suburban towns, where Saturday morning crowds throng the shopping centres and only the food-queues reminded one of the war. The water-temperature was 93°-95°, oil-pressure around 30 lbs./sq. in. and the big Jaeger speedometer and rev. counter read to "80" and "6,000," respectively. A 1927 long-chassis Jowett was duly tied on behind and, its rear brake repeatedly catching fire, a garage enticed to make a tow-bar out of a lump of tree for 6d. Whereupon the H.R.G. towed us, now in acute discomfort owing to steering and transmission anxieties, at the velocity of 50 m.p.h., 60 miles home, still giving its 35 m.p.g. Immediately afterwards a Chummy Austin Seven was driven to London at slow but schedule speed, that the Radford Hillman Fourteen could be tested on the morrow, which it was, as duly reported elsewhere, everyone having survived the blitz. Thereafter it was Austin motoring, to make the coupons last, with growing appreciation of the country and a strengthening dislike of towns.

TRYING A SECOND-HANDER

A Road-Test of a 1939 Hillman 14 Saloon from Harold Radford & Co., Ltd.

AS we have been taken to task in the past for testing and enthusing over Axis motor-cars, it occurred to us that it would be opportune to put a typical British medium-sized saloon through its paces. If any reader objects to devotion of space to a car of this nature we can defend ourselves by saying that, if Messrs. Strachan and Tubbs are to be believed, the sports car is as good as defunct anyway! At all events, this Hillman Fourteen saloon which Harold Radford & Co. Ltd. presented for the sort of trial we had in mind is just the type of car which so many enthusiasts employ nowadays on journeys of national moment. It offers fair comparison with those Continental saloons which we have never scorned and it suggests a sound basis for a very effective future sports-touring car.

Externally a well-balanced, essentially modern and eager looking car, the Hillman Fourteen is typically British in its appointments. It seats five in comfort on leather-upholstered seats, has a simple instrument-panel with two large main dials before the driver and a huge cubby-hole before the front passenger, and is possessed of an efficient sliding-roof, hidden spare wheel and tool-kit, and a roomy rear locker. The modern-style artillery wheels and moderate radiator-grille give the car style; in keeping, choke and ignition-control are automatic. The four-cylinder 2-litre s.v. engine performs admirably up to its maximum and is unquestionably a top-gear performer. If mood dictates, the Hillman can be allowed to drop to 10 m.p.h. on the highest ratio without any serious protest from the power-unit's flexible mountings and pick-up becomes useful from 20 m.p.h. onwards. There is all that silky, "feed-the-gas-and-it-performs" action that is one of the best points of far larger Americans. At the upper end of the scale, speedometer readings of 65-70 m.p.h. are entirely effortless and 80 m.p.h. was achieved with no fuss, wind-roar apart. On the other hand, wagging the gear-lever as the sportsman is wont to do produces maxima of 18, 30 and 50 m.p.h. on the indirect gears. The central gear-lever is lengthy, but enables quite rapid changes to be accomplished, either double declutching or, better, just slashing through the synchro-mesh. From rest, it was sometimes a trifle difficult not to confuse the position of second gear with those for reverse and top, as all lie in the same plane—the solution, of course, is to start in bottom. The handbrake lever on the right-hand side is sufficiently far forward to provide convenient egress from the driver's seat without being difficult to reach. It held well and the brakes so actuated really functioned in reverse on freak-gradients.

In conformity with the need for increased fuel-rationing, we had to limit our experience of the car and drive it mostly in a sober fashion, with a deal of coasting. Even so, something like 150 miles was covered on what must have been less than six gallons of petrol, and, driven rather harder, the consumption was about 20 m.p.g. And, to us, "driven harder" meant quite a few climbs of trials-type hills and several miles with the speedometer at the "70" mark. The speedometer-needle went rather light-headed after "65," but there is no doubt that the Hillman was cruising very happily at over 60 m.p.h. and reaching over 65 m.p.h. With full load it climbed a 1 in 6 gradient in Surrey at 30 m.p.h. and restarted easily on this hill. The clutch functioned well, although inclined to be fierce, and the accelerator permitted excellent judgment of wheel-spin.

Engine: 4-cyl. s.v. 75×110 m.m. (1,943 c.c.). 51 b.h.p. at 3,600 r.p.m. Coil ignition. Pump and fan cooling.
Gearbox: 4 speeds and reverse, central control.
Ratios: 4.89, 7.29, 12.08 and 17.42 to 1.
Dimensions: Wheelbase: 9 ft. 6 in. Track: 4 ft. 7½ in.
Body: 4-door, 6-light metal saloon.
Brakes: Bendix-Cowdray. R.h. lever.
Makers: Hillman Motor Co., Ltd., Coventry.
Price: As tested, £395.

The suspension is supple and permitted some roll when cornering fast, as one expects from a touring saloon, but the Hillman engineers deserve full marks for their transverse-leaf-spring system of "Evenkeel" independent front springing. The car was remarkably comfortable and stable at seemingly impossible speeds over atrocious surfaces and the usual sound of pattering tyres was conspicuously absent. Moreover, only a trace of return movement came through to the steering-wheel under these conditions and none at all on ordinary roads, nor was there any column or scuttle shudder. The steering is accurate and its low gear ratio (3¼ turns lock to lock) is offset by full and extremely vivid castor-action at all speeds; the lock is very good. This is really first-class independent suspension. In spite of a tendency to roll, the Hillman could be cornered rapidly and the tyres only protested when acute bends were taken at what the majority of users of this class of car would consider stupid speeds, nor is it easy to make the car slide.

Some acceleration tests were conducted, casual driving methods off-setting possible speedometer optimism; 0-50 m.p.h. occupied around 16 secs., 10-30 m.p.h. in top gear approx. 11 secs. and, in second gear, approximately 6 secs. The engine took such medicine without protest. The oil-pressure showed a healthy 30-40 lb./sq. in. There was only a momentary vicious pinking at one particular throttle-opening over a very small speed range, which is very different from suffering this reminder of the low octane-value of "Pool" whenever the engine is opened up under load.

The Hillman was an extremely pleasant car for rapid negotiation of heavy traffic and equally pleasing when one was in a hurry out on the open road. The body was well-ventilated, draught-free and very spacious. The brakes were reasonably progressive and entirely adequate to the performance capabilities. The rear-view mirror was fairly useful, the seat-adjustment excellent and the interior appointments solid and efficient. The driver's door locked with a Yale key, as did the luggage-boot, and when the ignition key was removed the horn was inoperative. The spare wheel stowage panel was easily released, although the key turned the opposite way from the usual. The fuel gauge seemed very reasonably reliable and its needle was dead steady; the dynamo charged fully and the lighting was effective. The test served to remind us that too much is apt to be put out in praise of race-bred Continentals, and that British medium-sized, medium-priced saloon cars will also average speeds round about 40 m.p.h. in security and great contentment. The Hillman could certainly do so, and with, as it were, an inbuilt impression of British conventionality suggesting entire dependability and freedom from anxiety. The rugged engine, it is true, was not good to look upon, but it is doubtful if it would be so much as glanced at in 50,000 miles. It had an accessible dip-stick and the usual air-cleaner, and used no water during the run. This report is headed "Trying a Secondhander," but the car has been written-up as if it were a manufacturer's demonstrator. That, in effect, it is, for there was not the tiniest blemish externally or internally and only one entirely minor rattle, to suggest that it was offered secondhand; the mileage was 9,000 and the price asked £395. The 5.75 in. by 16 in. Dunlop E.L.P. tyres were unmarked. A most useful car, in an era of "no new cars," but then Harold Radford & Co. specialize in these high-class secondhand cars, which are reconditioned and sold from their spacious premises at Melton Court, S. Kensington, London, S.W.7 (Ken. 6642). Mr. Harold Radford is himself a really keen motorist, determined to carry on as if war had not happened, offering, incidentally, cars representing valuable transport to people engaged on essential war duties.

Letters from Readers

(*Continued from page* 358)

acceleration, comfort, road-holding and silence; I refer to the Railton. Your road-test of September 1938 emphasised these good points, and having run two of these cars for many thousands of trouble-free miles I can fully confirm them. Before buying my second Railton I tried the twelve "finest cars" produced in this country, the U.S.A. and the Continent, but for a general-purpose, fast touring car could find no equal to the Railton in its latest form. It is curious that no other Anglo-American hybrid has been able to combine the best of both types, as the Railton has done.

I am, Yours etc.,
Army P.O. CAVALRY OFFICER.

SCUDERIA M.A.R.S.

[We have put the case for the Scuderia method of joint ownership and a number of such organizations have been described. In this article J. R. A. Green, now 2nd Lieut., R.A.S.C., describes another successful stable.—Ed.]

THE period over which our motoring experiences extended was from 1933-1939, although strong vintage sympathies, and impecunious state, led us to purchase motors of a much earlier era. These motors were owned by a band of four enthusiasts, a delightful partnership, which only a war could break up.

Our first enthusiasm found outlet on hearing of a 1923 Morris-Oxford, which with the astoundingly small mileage of 23,000 to its credit, could be obtained for £2. A very cold winter's Saturday saw us proudly towed back to our garage. This place was an enthusiast's ideal. It consisted of a large old coach-house adjoining a public garage and with its own private yard and drive leading through the (to us) familiar portals of an old coaching-house.

On arrival here, the cumbersome touring-body of the Morris was removed from the chassis. Then the slower process of careful reassembly of the engine took place, with mildly polished ports (anyone familiar with Morris ports will quite appreciate the limitation !), high compression-gasket, and an S.U. carburetter replacing the original five-jet Smith "gas-works." The aforementioned private drive then came in for a considerable amount of use, as all members of the Scuderia tested the machine in chassis form.

A sports four-seater body was then made, with large rear petrol tank, all rather Bentley and pseudo, but definitely individual. Painted the inevitable green, she was ready for the road—well, almost ! A little misunderstanding about oil-levels caused a big end to run, when passing the Daytona Hornet Special which was being used to check the Morris speedometer. The Hornet was then registering a steady 70, so we felt that our months of labour had not been in vain. Occasional grovelling under her always spotless sump attending to offending knocks were about the only repairs necessary, until neglect in this direction while on holiday led to the original engine's seizure. However, the garage outside which she conveniently stopped had a 1927 Oxford engine available, and in three days we were motoring again.

During two years' hard use the old machine carried us to Brooklands and Donington meetings, as well as to Vintage S.C.C. trials, without any embarrassing incidents, though an insistence to make fire in the middle of Oxford Circus was once a little trying.

By now a Le Mans 4½-litre Bentley had replaced the Hornet, and all four of us were ardent members of the V.S.C.C.

The Bentley was raced in the 1929 "Double Twelve" by Mr. and Mrs. W. B. Scott, when the back axle got tired in the 23rd hour. Later, competing in the 500 Miles Race, she finished fifth, at 98.8 m.p.h. A "4½" is a bit unwieldy for trials, as participation in the Vintage S.C.C. Cotswold event soon showed us, so her luck was tried at a Crystal Palace meeting, where Mr. McKenzie easily demonstrated that *his* "4½" was plus that little something !

Another acquisition which had her debut in racing that day was a blown, roller-bearing Lea Francis four-seater. Supercharged by a No. 9 Cozette, this very potent machine romped home with a "first" in the first Vintage race. This was most encouraging, as we had not spent much time in preparing this motor, our labours having been devoted to rebuilding another blown 1,500 c.c. job, about which more anon.

The Lea Francis was apparently the car raced by Oetzmann in the 1931 "Double Twelve," and was a replica of Peacock's Le Mans car. She provided a remarkable two-gear (bottom and top—the other two got mislaid) run from Bristol to town once, in record time ; and while being taken to her "duration resting-place," the writer extracted 92 m.p.h. as a parting gesture.

Her previous owner, beset with back axle troubles, had thrown the "Leaf" aside, in favour of the 1929 ex-Campari 1,750 c.c. T.T. Alfa Romeo. Possessed of phenomenal acceleration, the Alfa would go up to the "100" mark, to the accompaniment of a pleasing supercharger whine.

So for the modest sum of £15 the Lea Francis entered our stable, and a little money and time soon developed her into a very fast touring machine.

Interest in specials had attracted us to a Bristol venue, where our first visit made us confirmed C.A.P.A. enthusiasts, so that immediately a suitable motor was sought.

Weight limitations decided us in favour of an early Austin Seven. This was promptly stripped and induced to run to Bristol, a feat it seemed very loth to perform, using fantastic quantities of water, petrol, oil and tyres. Snow-covered roads and heavy sleet prevented our becoming bored, during the rare moments when the machine got above 20 m.p.h. To complete one lap at the venue was, however, quite beyond its rear main bearing's capabilities, and this immediately liquefied. We tired a little of Austins after that, though several other members showed precisely what miracles these little cars could be made to perform.

The next meeting saw us in possession of a "Surbaisse" Amilcar. Her three-seater, decked body was neither light nor pretty, so this had been removed, and horror-stricken insurance companies were approached for a cover-note to protect us from the law. Her journey to Bristol was truly meteoric, leaving wondering faces peering up the road. Nor did her first burst of speed belie her later achievements. Quite why such unkind things are said about these motors I don't know. The two we've had were excellent little machines. Their weakness lay in their big-ends, which will readily cry out loudly if in worn condition, and later events soon taught us that one should then stop.

On this run the Amilcar bettered an average petrol-consumption of 35 m.p.g., and exceeded 70 m.p.h., a speed which our second "Surbaisse" also attained. Removal of starter and dynamo in pursuit of weight-reduction meant constructing plates to cover the gaps. Perhaps these weren't the world's best fit, as a pair of Castrol-green shoes displayed by the driver testified. Apart from spraying you with oil, an oil breather belched forth fumes in a very rude manner, and immediately directed themselves unto the driver's mouth, so there was never a dull moment.

Our first effort gave us second place. Later, undue revving in an intermediate gear caused a knock, which cried out to all the world for attention. Continued urging brought a connecting rod and its attendant piston out of the side of the crankcase, in the neatest exit (and largest hole) I've ever witnessed. Mr. Amilcar, desiring a compact engine, had left a clearance of barely a ¼ inch between the big end outer flange and the crankcase wall, and the absence of white metal, and a tendency to whip, had soon closed the gap and exposed hidden machinery to the outer world.

The advertisement which immediately appeared for another engine I then felt could have been made a standing order to appear with each meeting. The second unit travelled down, decarbonized and all nicely cleaned, under the Bentley tonneau (it was cleaned because the writer had to nurse it). A morning's hard labour effected the substitution, and the afternoon saw us merrily cracking away.

A team mate was found in the form of a 1927 "Grand Prix" twin o.h.c. Salmson. Not as light in her steering as the Amilcar, she seemed to have a well-designed engine, but ours had a pronounced tendency to fry her plugs, which lived between the camshafts in a very hot place. This always prevented her from distinguishing herself.

The greatest excitement experienced in this motor was on her tow to Bristol. The constant efforts of the author to express his opinion that over 70 m.p.h. was not a respectable towing speed proved utterly unavailing, as the "Sammy's" brakes were quite unequal to the task of either breaking the towing bar, or of having any effect upon the "Silver Eagle" Alvis which was towing her. A strong desire to avoid a repetition of this type of excitement, and the fact that the Alvis (which had been procured for this purpose) had sprung a leak in that part of its water-system which had easy access to the sump, led to our next Amilcar being driven to the West Country.

We had experience with two "Silver Eagle" Alvises. They were very fast, both being capable of over 70 m.p.h., and the three-carburetter job, with a light aluminium, two-door saloon body by Carbodies, was good for 80. The white metal plugs in the cooling system were, however, liable to leak through corrosion, and insertion of a piece of tree hardly effected the best of cures. In common with all the earlier Alvises, their Timpkin Roller propeller shafts, when worn, were

SCUDERIA M.A.R.S.—continued

the very devil, it being impossible to overcome the excessive lash without renewing both universals.

It was not the most opportune time to choose for a demonstration of comparative acceleration powers, but with the malignant Austin "Seven" in tow, we certainly showed a 1932 2-litre Lagonda who could first reach 60.

The run westwards on the second Amilcar was commenced with number two big end in a far from happy state. An inoperative speedometer helped little to maintain a discreet maximum, while it is feared that the presence on the writer's tail of an American roller caused his contempt of such a ghastly show of road-holding to be shown by batting at speeds (subsequently confirmed by the escorting Bentley) to be well in excess of 60 m.p.h. When the big end liquefied, a quite warm "4½" pulled up to inform the miscreant that the last 7 miles had been knocked back at about 73 m.p.h. . . .

A 1926 model, with a very attractive narrow two-seater body with staggered seating, this Amilcar showed that for a 9-h.p. job her acceleration was superior to that of the "P" type M.G. Midget, and the steering was as pleasant and positive as any we've ever handled.

An hour's roadside labour saw us continuing, it must be admitted, rather unevenly, on three cylinders.

This motor had been purchased for £10 (the same price which was paid for both the other French machines) to provide the fourth member of our scuderia with a C.A.P.A. car. She was obtained to replace our E.H.P., which at that time was the cause of some controversy. The E.H.P., a 1925 1,500 c.c. job, had handsomely shattered C.A.P.A.'s lap record, previously held by Dick Cæsar's A.C.-engined special "Alfi."

This feat we later discovered she performed with the rear main bearing non-existent. This very rare motor cost very much more than the customary "tenner," and we all felt should not be battered at Bristol, but turned into a fast road car, suitable for Vintage S.C.C. speed events.

This is where the controversy came in. Mr. Heath Robinson himself would have admitted that bearing support from twisted wire (yes, my friends, WIRE) was not quite the ideal. So half the foursome presented the stable with a 1930 six-cylinder Hotchkiss engine. The remaining two admitted it was vintage, but didn't like it. Placing a 4-litre unit in a 1½-litre chassis did seem very brutal, sacrilege apart, while it was very much doubted if it would better the terrific performance of the original engine, powerful as it was.

Arguments ensued, wherein "Paris Nice" Hotchkiss, 25-h.p. Bedfords and Delahayes were featured. It ended in new engine mountings being installed and the first steps being taken in the wrong direction. But the gods which watch over such proceedings would not sanction such a conversion, and the cylinder-head got mislaid while away to be machined (very cunning), and meanwhile the crank-case of the E.H.P. and its broken pieces were hurried to Mr. Barimar.

The outbreak of hostilities found two feverish enthusiasts reassembling with loving care, and considerable financial expenditure, the complicated machinery to have the machine in one piece, so that should some less informed person later discover her, hers might not be the fate which befalls so many individual "old timers."

The early history of this car is a little obscure. She would appear to have been built to the 1925 Grand Prix formula, and an E.H.P. did distinguish itself in a Spanish Grand Prix. They were also raced at Le Mans, and elsewhere on the Continent. This particular motor finished her racing career at Brooklands in about 1931, when one Olive drove her at a lap speed said to have been 114 m.p.h. This, with a two-bearing crankshaft, seems fantastic, though at Bristol we reached speeds in the 90s, with obvious power in hand.

Her overhead camshaft is operated through a shaft-drive, from the front end of the crankshaft, which also drives the No. 8 Cozette supercharger, which is mounted at the front of the unit. Her aluminium sump, frontal cover, valve cover and combined clutch and gearbox housings were of extremely rough cast, and a spot of emery wheeling was turned to these quarters, greatly improving her outward appearance. The balanced crank-shaft is highly polished and drilled to provide oil passages to the main bearings and big ends.

The steel connecting-rods, too, are well-finished, and neatly drilled.

The rear engine-mounting consisted of a large steel tube running through the rear of the crankcase, which was cast in one piece with the block, *a la* Riley Nine. It was here that hammering from the crank, in the absence of its rear bearing, had caused a mighty crack to spread from side to side. The lower portion of the cup, holding this wanderlust bearing, had also broken away—probably where the trouble originated. It was this area that came in for Mr. Barimar's attention.

The gears whined pleasantly on the intermediate ratio, and the box was a delight to handle, extremely rapid changes being the order of the day. The cylinder bores were not excessively worn and new piston rings, we felt, would prevent oiling-up at low r.p.m.

Had we at the time known the sad state of her engine we should certainly not have run her, let alone show Ford V-8s where they got off on acceleration in any part of their range, a performance of which her four cylinders were easily capable.

Reverse and first gears followed each other in line with no stop, a point which would have worried us at the starting-line with another E.H.P. in front!

The ribbed brake-drums, though not of immense proportions, gave terrific anchorage, and even with a modern Rover on her tail, discretion had to be shown when stopping. The steering was high-geared and all one would expect from a thoroughbred. The chassis-frame, with quite deep members, was stiff and was underslung at the rear, the springs being mounted outside the frame. At the front end of the scuttle the frame stepped up in Riley fashion and continued to the normal mounting of the front semi-elliptics. The radiator was very "Delage," and originally had an awful cowl, which we preserve as a souvenir of her Brooklands days.

A starter ring and housing for a starter seem to point to Le Mans specification, and rumour that an E.H.P. was once in existence in this country with a two-seater decked touring body might be the explanation.

That further details were not available of the original appearance has been the cause of great annoyance to the writer, as it was felt this worthy car should be restored to her first form. However, with no data to work upon, the next best thing was done, and that was to lower the attractive two-seater racing body, by removing two ugly logs upon which it rested, presumably to accommodate some bulky person; this resulted in an unbelievable improvement in her appearance.

Hostilities prevented the completion of our plans, but little remains to be done to finish the work.

Our entry into the veteran period was made possible by procuring a Bebe Peugeot of 1912-3 vintage. This extraordinary little car is supposed to have lapped Brooklands in 1914 at just over 60 m.p.h., holding its class record for 8-h.p. cars at that period.

Most of our time was spent trying to discover plugs which wouldn't oil up in the very slow-running engine. None of us felt she had any inclination to achieve 60, and a tow behind that rapid Alvis left a nerve-shattered driver firmly convinced that no human could hold her at that speed.

The gear-selector, of primitive design, was rather worn, and had an interesting manner of trying to collect two gears at one time, which made gear-changing quite an art. However this, and excessive oiling, were both receiving attention when we felt the call to arms.

The Peugeot possesses a peculiar red two-seater body, very reminiscent of a circus "dodgem car." Built under Bugatti patents, she has the familiar reversed-quarter-elliptic springs at the rear, and very narrow front dumb-irons, merging into a solid tubular construction at their extremity. Her brass radiator weighs just a few ounces less than that of a Bentley, and has a frontage such as should never cause overheating.

The engine is cast in one piece (well, almost) though it has got an aluminium plate underneath, which can be removed, to enable one to gaze upon the interior. From this end, of course, decarbonization is carried out. Screw-in primers give access to the valves on each side of the block. Tubular connecting-rods were employed, attached to modest iron pistons with long skirts. The whole car takes to pieces with surprising ease and rapidity.

The least said about the brakes the better. A coachman must have thought these out as their external operation made her tow right through London's rush-hour traffic as exciting a ride as one could wish to experience.

Now the Peugeot, with the E.H.P., Bentley and Lea Francis for company, awaits the return of unrationed petrol and an inexhaustible supply of clean sparking-plugs.

SCUDERIA M.A.R.S.—continued

A number of interesting cars has found a way into our stable, each bought with visions of fast yet reliable touring, an early Jowett being the only car from which such a performance was not expected.

A Hadfield Bean, specially built for the 1929 Monte Carlo Rally, and festooned with gadgets, most of which, surprisingly enough, worked, gave us a few fast runs, before the second disintegrating of her back axle put her off the road, owing to the impossibility of replacing the offending pinion. This car was fitted with the 18-h.p. Meadows engine, similar to that used in the 3-litre Invicta and Crossley cars. She had the usual open fabric sports body.

General looseness in the machinery evoked violent pins and needles above 60, though there is little doubt that in her heyday she must have been good for nigh on 80. Another car, similar to the Bean in appearance, which we had for a short time was a 1928 2-litre Lagonda. Externally, she was in lovely condition, and quite impressive and well proportioned, but—enquiry from her previous owner into the unusual maximum of but 55 m.p.h. led to a sad confession.

Small jets, we were told, had been inserted, to prevent weak-willed speeding, as above 60 m.p.h. her big ends were very prone to run. We felt this surely must be a case for investigation, yet somehow or other more pressing overhauls, and, I think, her twin o.h.c. engine, prompted us to dispose of her; a friend had some trouble-free if leisurely motoring from her. A 1929 Ex-Dobson "Brooklands" Riley provided us with a most thrilling fire on a run to Devon, which quite exhausted the Bentley's fire-extinguisher and left precious little in those of two A.A. men. We had insisted that continual backfiring was due to plugs, but the third member said "No! I've just bought new ones"—we didn't learn until that night that these had been procured from Woolworths!

Like most old racing cars, much wanted doing to her, and about 70 seemed her limit. Once an inquisitive form was found lying under the car. On withdrawing himself he said he'd heard the supercharger whining and was trying to ascertain where Mr. Riley had fitted it. It must be admitted that before it gave up, that back axle *was* noisy!

Having heard the praises of the "12/50" Alvis often sung, the writer had visions of a fast economical car in a touring model which was going cheaply. The engine was treated to a most thorough overhaul, and when completed, for a few seconds was as quiet as a mouse. Then the familiar timing-gear racket set up, though this only came in at certain periods, and otherwise one couldn't have wished for a sweeter "four."

An enthusiastic clutch-stop made gear-changes a case for lightning movement, and apart from some noise on the lower gears it was a treat to handle. The steering for so light a car was unnecessarily heavy, but quite positive. However, the one chief failing was in the propeller-shaft; nasty things were said about Mr. Timpkin (possibly most unfairly, as the car was by no means new). A 1932 beetle-back two-seater body gave the car a very attractive appearance—no! vintage instincts hadn't caused us to write off a 1932 "12/60," a smash had done this, and we rescued the body. One thing always puzzled us with this motor, and that was an extraordinary obstinacy in declining to start on rare occasions, when nothing short of a one-in-eight gradient or a tow would bring the engine to life. Nor did the attention of both Messrs. Lucas and Messrs. Solex effect a cure.

During a period in this car's reconstruction, a desire was expressed for a F.W.D. Alvis radiator. Enquiry into the price asked by a well-known spare parts dealer led to a rapid search for a complete car, which we purchased for less than had been asked for the radiator alone. This provided us with a very interesting Rootes-blown four-cylinder unit, which would urge its rather cumbersome chassis with 12-inch frame members surrounding the engine, and a heavy saloon body, along in excellent style. When new in 1929, it was said to be capable of over 85 m.p.h. When we got her, the usual extensive task of relining her front brakes, located within the chassis members, was distinctly necessary. Some enterprising youth, with obvious knowledge, immediately wrote to us stating he could supply spare parts, which he felt we might need; we didn't, because another enthusiast was found who could fit the F.W.D. radiator on to his much lowered "12/50," and after the Norris-Special had spent an expensive, yet enlightening afternoon throwing away four beautiful 500 c.c. Rudge engines, the F.W.D. unit was placed at the disposal of the two enthusiastic Norris brothers, and everyone was happy!

While on the theme of specials, it is felt that it would not be inopportune to issue a warning to builders of such cars. We have learnt that before you start on your special you want to estimate its final cost, double this, and add the expense of a year's garaging, and allow at least four times as long as you originally planned for nearing completion. If, however, you are connected with the "Trade," which, incidentally, none of us are, you might stand a better chance of getting the machine running inside twelve months.

Not that we hold anything against specials, our 8th series Lancia-suspensioned V-8 Ford-engined job should be great by about 1960, and the F.W.D. engine with glass-like ports, and perfect external finish, in her Frazer-Nash-type frame, is one of the most pleasant sights I've ever seen, and can produce nice long black marks on the road when she accelerates. Visits to the Norris workshop became a regular occurrence, and led to our being initiated into "Nashing" in a 1933 T.T. replica model which was very quick off the mark, and definitely had an individuality all of its own, with crash gear-changes, and a spring bracket eating into one's rearmost parts. Even a friend's Type 37 Bugatti wasn't quite the same, though it was uncomfortable enough and possessed of perfect roadholding and a good performance, even with low-compression pistons fitted. However, like the E.H.P., these cars are a little stark for town touring. It would not be loyal to pass over the old Bentley without a note of praise for her sterling qualities, and appreciation for such reliable service.

Built specially for the 1929 "Double Twelve," she had full Le Mans equipment, with the 25-gallon petrol-tank having the peculiar feature of twin snap fillers, as opposed to the more usual 6-inch central affair. Large size rev. counter and speedometer (the latter rather annoyingly possessing no mileage trip) enhanced the appearance of her well-filled dashboard. Her Le Mans specification included a reserve scuttle oil-tank with pipeline to the sump. On one occasion when the sump was in need of nourishment, the tap beneath this tank was turned on, and then an unfortunate lapse of memory set in, and some minutes elapsed before the driver came out of his reverie. On the homeward journey we spent long periods under lamp-posts de-oiling the plugs, the miscreant being allotted those on the exhaust side.

In spite of Le Mans ribbed brake-drums, stopping her two tons of bulk always required rather herculean efforts. The adjusting cable, which could be wound up by turning a knob beneath the driver's legs, snapped once, leaving only a hand-brake operating on the rear wheels, and the gear-lever rather disconcertingly came away on one occasion in the driver's hand, but we never failed to reach our destination in the old girl.

Her twin S.U. petrol pumps, located beneath the front seats on the chassis cross-member, were unable to cope with the petrol situation in the upper eighties, and quite energetic pumping was called for to keep pressure in the tank. This exertion was due to a slight air-leak round the cork washers, and at a Donington meeting made the Bentley's performance most unimpressive. Peter Robertson Roger, I believe, experienced a similar symptom on his blower car.

In original form her body had been fabric-covered, but the elements had necessitated aluminium panelling at some period, and this had been sacrilegiously sprayed black. Light leather-laced seats provided not the most comfortable ride. A sensible feature of the body was a beam behind these front seats, which not only strengthened the body but also gave a neat appearance to the tonneau line. Of precisely the same construction was the sister car, winner of the 1929 "500," and now owned by Mr. Emons.

After her first racing days the original 3.3 to 1 axle ratio was replaced by the standard back axle ratio of 3.53 to 1, and with this 92 m.p.h. was the best recorded speed.

A really good Bentley is undoubtedly a sheer delight, but we soon discovered that bringing a Bentley up to this desired standard can be an extremely expensive business. The regrinding of the crank-shaft at Bentleys, with the substitution of Aerolite for the original "hour-glass" pistons, which had lapped up gallons of oil, and were quite "loud" when starting from cold, cost a packet. Skimming and remetalling the brake-drums, and attention to the camshaft as well as an examination of a noisy third speed in her "D" type box, were further items of expense. But there is no denying that, in

SCUDERIA M.A.R.S.—continued

good condition, these cars will run for ever, and give a class of motoring that very few makes have ever excelled.

The writer has made a close study of this marque, and we have been able to trace seven genuine racing unblown "4½s," two Dorothy Paget cars, and a Birkin practice car. The opportunity to view old number "6" 3-litre aroused much enthusiasm, though a 4½-litre engine then nestled under her bonnet. Another friend had a 3-litre practice car; and touring the "right" car dealers unearthed two more team cars. A most unusual job was the ex-Thistlethwayte 4½-litre, with full-length under-tray and streamlined four-seater body (most rare on a Bentley) and possessing the tapering type of radiator.

The Speed Six cars were far more elusive, and only twice did we see these models offered for sale. The Dunfee crash wrote off the famous old No. 1, then performing with an 8-litre engine, and we hear a team-mate was broken up, so it would appear but one of these cars is still in existence. The experimental 8-litre with Vanden Plas body and 40-gallon rear-tank should make someone a nice post-war motor, if the tax doesn't become any more awkward.

Experience with a friend's late 1926 "Red Label" taught the writer that as regards docility and general feeling the 3 litre is the nicer model to handle, and when fitted with a 4½-litre engine, speeds well in excess of 100 m.p.h. are possible, with acceleration in the order of 0-60 m.p.h. in 14 seconds. Ribbed brake-drums off a Speed Six will arrest the progress of this 26 cwt. car in a decisive fashion. The slightly lower-geared steering of the 4½-litre is lighter than that of the 3-litre, and is rather preferable. Like many other enthusiasts, we felt the combination of these features, with the very necessary Hardy Spicer propeller-shaft, would make as pleasant a motor as one could possibly wish for, and for considerably less than £200. This is an ideal we hope to realise after the war.

The ex-Ramponi 1931 "Double Twelve" and T.T. Maserati once nearly tempted us, but we couldn't see quite eye to eye with the dealer on the value of a Le Mans Bentley. . . .

One of our greatest disappointments was missing by a few hours the opportunity to purchase one of the last 3-litre Sunbeams produced, not actually vintage, but a lovely motor, capable of 90 m.p.h., and positively oozing personality.

Owing to each car's fascinating individuality, we were always loth to part with any of them. However, the expense of hiring large portions of garage to house them in led to our moving into a warehouse. Here, downstairs, five cars could be stored, and dismantled machinery taken upstairs. This manœuvre was carried out with the aid of a winch. There was an exciting episode once when for several minutes it was doubtful whether our Baby Peugeot would come up, or whether we, trying to hold the winch down, would go out—that uncertain tipping sensation being ever-present, until the Peugeot was hauled in through the opening, with considerable relief.

Six years' association with various sports cars has taught us much. Don't ever dismantle two cars at the same time, and intermingle the parts, as there is then a strong tendency to produce a couple of mongrels. . . .

Not being ourselves able to drive during, what was to us, a more interesting period of motoring, we have at least tried to recapture the joys the Game held around 1927. We have also keenly interested ourselves in pre-1914 designs. However, our limited experience has left out many makes we would like to have sampled, and we can only hope that the post-war period will still leave some good examples of such makes as the "19/100" Austro-Daimler, Le Mans Chenand Walcker, Cottin Desgouttes, Ballot, Excelsior, H.E., Leyland, Lorraine, Moveo, Napier, O.M. "2/3" Le Mans Alfa Romeo, S.S.K. Mercedes-Benz, "Red Seal" Isotta Fraschini, six-cylinder Amilcar, Itala, 40-h.p. Sports Fiat, Straker Squire, Unic and Voisin, to mention but a few of the almost forgotten types which were once famous in the sporting world.

At present, like every other Englishman's, our one aim is to get this affair settled in the only way our honour will permit, and again make Europe a fit place for enthusiasts to live in.

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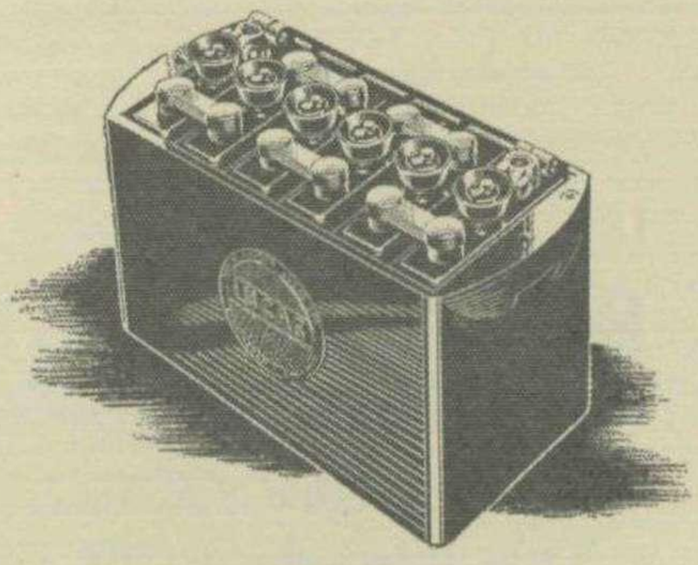
This space has been given by the courtesy of BENTLEY MOTORS (1931) LTD.

INTELLIGENT APPROACH TO THE BREAKER'S YARD

FEW enthusiasts can resist an opportunity to explore a hitherto undiscovered breaker's yard, although the chance of finding anything rare therein is a slender one nowadays, particularly if the scrap yard in question is on a well-frequented road. The breaker sells scrap-metal and spares, and if he does any business at all in the latter, he will stock the popular makes, for there is no object in keeping unbroken makes so unusual that a call for parts is highly unlikely. So far, the war effort is finding sufficient scrap without clearing up the many car dumps dotted about the country and it seems that breakers may be having quite a good time, now that new spares are so difficult to obtain. And while breakers exist, enthusiasts will hopefully probe their stocks. There is a deal more to be had out of such a voyage of discovery than merely trying to unearth a dirt-cheap modern or a vintage or veteran still intact. It is, for instance, surprising how baffling can be the identity of even commonplace cars when radiator, body and some of the major components are missing. In trying to ascertain the make and age of such cars, much of historical and technical interest can emerge. The cone clutch is often associated with the early post-Great War era, prior to 1925. Yet you may come across Renault models of quite four years later with inverted leather cone clutches, although what at first appears to be a cone clutch on a Riley Twelve of the same period will turn out to be the aluminium casting of the earlier clutch doing duty as the thrust member of a plate clutch. The Morris Light Six provides an interesting example of a clutch functioning in engine oil, and if you find a Rover Six of about a dozen years ago, you will see another example, oil being force-fed from the engine to gearbox and clutch. In rather the same way, separate gearboxes usually date a car as very old, yet fairly recent makes having this construction include Aston-Martin, Bean Fourteen, H.E. Six, Armstrong-Siddeley Fifteen, Bugatti and Bentley. The H.E., incidentally, had a layshaft beside the driving-shaft, but the constant-mesh wheels at the rear of the box. If you see a massive box with intermediate bearings for the shafts, the car it belonged to was probably a pre-1928 Arrol-Aster, while a speedometer-drive taken through an intermediate fibre wheel from the top and third sliding-gear, instead of from the rear of the box, suggests a "20/60" Vauxhall; a tyre-pump mounted on the gearbox, Mercedes-Benz.

Rear axles offer less easy means of identity, but an underhung worm-drive on any but very old cars indicates Triumph Super-Seven, Rover, Aston-Martin, Standard Nine or Lanchester. A bare chassis-frame provides an interesting problem. There is three-quarter elliptic rear springing up to comparatively recent times on the Morris-Cowley, the pronounced sweep-in at the centre of the H.E. frame, the "U"-section side-members of the O.M. and Rhodes, and the big, central tubular cross-member, through which the driving-shaft from the clutch passes, of the older A.Cs. Brakes, before Mr. Lockheed, Mr. Bendix and Mr. Girling standardized their operational methods for us, were a study in themselves, but it is interesting that as late as 1928, "7/12" Peugeot, Jowett and Chevrolet were without front brakes, while the transmission brake reappeared to some extent about this time to provide the "separate braking system" demanded by law—you will find it on the "20/60" Vauxhall, for instance. The truly knowledgeable can fix the date of a car by even finer points—the Rover Fifteen has two geared-together brake cross-shafts and, if the gearing is enclosed the car is 1927, if exposed, 1928. Should you chance upon a "16/50" Voisin, here is an example of brake actuation so complicated that "The Automobile Engineer" once said of it "the complete system has to be seen to be fully appreciated." As to engines, can you name a push-rod o.h.v. unit with ports on opposite sides of the head; an engine having a flywheel in the centre of its crankshaft; a unit having an exhaust passage within a detachable head, with exhaust pipes attached to front and rear; or an engine mounted at one end on a leaf spring assembly? If not, your education, via the breaker's yard, is not by any means completed.

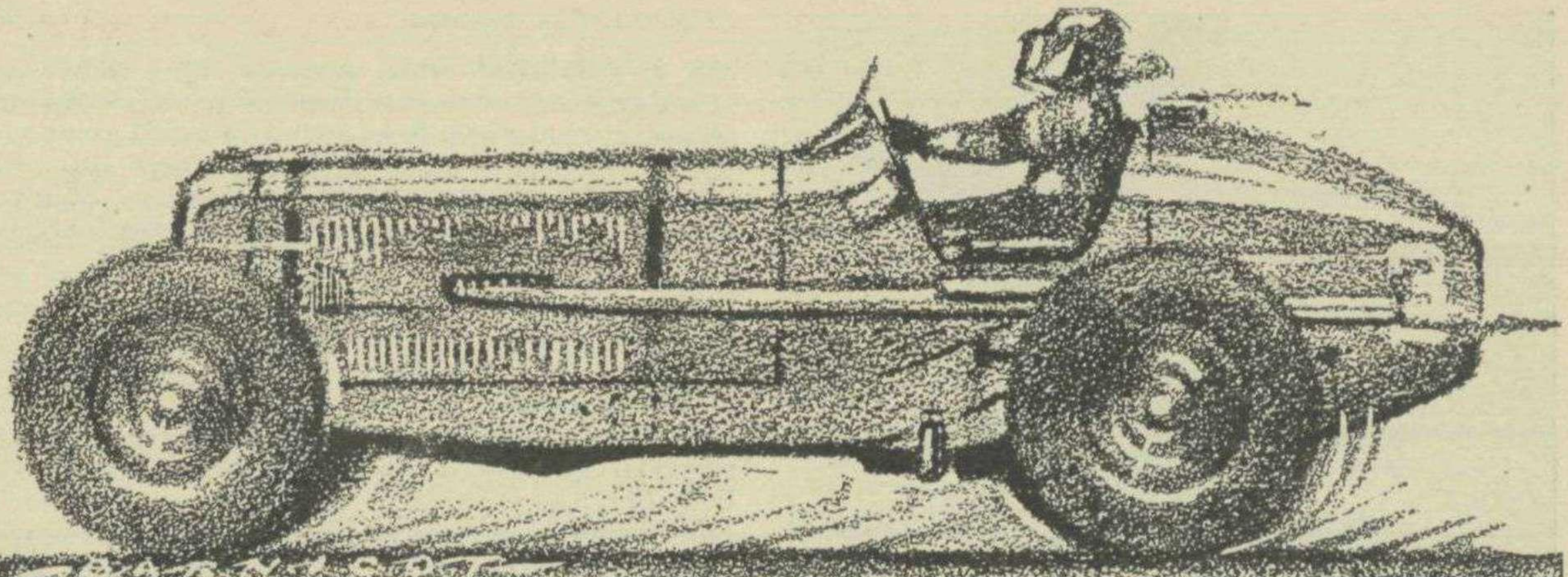
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RUMBLINGS

Michael May's Stable

BEING exiled in a part of the country which, in peace time, was not without motoring associations, it seemed a good idea to pursue some of them as a means of off-setting war-boredom and so, while passing through Ripley one Sunday afternoon, it occurred to us to drop in on Michael May, whom we found busy amongst his well-known Alvis cars. Michael started motoring with an " 8/18 " Talbot and followed this up with a " 10/23 " Talbot, a Ceirano and a side-valve Aston-Martin, before becoming Alvis-minded, with " Silver Eagles " and a " 12/50 " interspersed among his well-known cars of this make. How effectively he has modified them and handled them is evident from the display of B.A.R.C. " honour-plaques " which occupy one wall of his coach-house.

The Alvis with which May has done so well in all kinds of races, in sprints and in trials, has also been his ordinary four-seater touring car. It started life as one of the " Double-Twelve " green Alvises, being, we believe, the car with which the Hon. Victor and Mrs. Bruce finished 13th in the 1930 race, at 67.54 m.p.h. In 1937 the Alvis, a 1,991 c.c. six-cylinder " Silver Eagle," was second in an Easter Mountain Handicap, second in its class at Shelsley Walsh, and first in the 3-litre classes at Littlestone and Poole. It won the First Whitsun Short Handicap at 94.72 m.p.h., a Campbell circuit handicap at 61.27 m.p.h., and its class at the Vintage S.C.C. Croydon speed trials. Its best Brooklands lap was at 99.61 m.p.h. During the winter of 1937-38 the engine, and that of the fabric four-seater previously owned by Powys-Lybbe, were exchanged, and in this latter chassis it is still in use in what is now the everyday tourer. Indeed, Michael was at work on this car when we visited him. The fabric body has weathered remarkably well and the triple-S.U.-carburetted engine has little objection to " Pool," on which it returns 24 m.p.g. at 40 m.p.h. averages. The car nowadays hurries about the country on vital war service.

Having shown us the outstanding features of this car, which is identical to the " 12/50 " chassis with those improvements found in later examples of that model, May brought out " the racer "—which, incidentally, he used for trials such as the Exeter, Gloucester and Inter-'varsity and for shooting expeditions to Scotland, apart from speed work. He recalled one



Michael May with his ex-" Double-Twelve " 2-litre Alvis at Brooklands



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RUMBLINGS—continued

run, in particular, when over 500 miles were covered in a day at an overall average of 40 m.p.h., including all stops, the cruising speed being an easy 75 m.p.h. All of which was done with the 2-litre engine. To overcome weaknesses in anchorage (the original brakes were pretty useless after one lap of the Mountain circuit) new brakes were made up and Lockheed actuation substituted for cable. Two master cylinders are used, located within the offside frame side member, one operating the front brakes and the other the rear set of shoes. Radiator and body have been dropped appreciably, inside and outside the side members, respectively, and of the original "Double-Twelve" body only the scuttle and door now remain, the back half having been replaced bit by bit as it fell to pieces. However, the coachwork is still essentially the original-style four-seater. Just before the war aluminium undershields were used and a streamline tail fairing was bolted on around the back panel. The seat of government is a small bucket chair rather far from the cord-bound, small spring-spoke wheel and the screen is humble Austin Seven, suitably built-up. The many drillings in the wide lower flanges of the typically Alvis side members testify to the experiments carried out in engine type and positioning. The present unit, which is 2,511 c.c. "Silver Eagle," is set well back in the frame. Special metal universals look after the drive between engine and gearbox and there is a cunningly-devised clutch-stop working on the standard Alvis principle. Suspension and axles are standard, although a number of leaves has been taken from the rear springs. The engine, with its three big S.Us., was only run up to the normal maximum of 4,500 r.p.m., yet it contrived to develop 120 b.h.p. on dope, the compression-ratio being 9.3 to 1 raced and rather lower toured. The 2½-litre would lap Brooklands at about 108 m.p.h. and gave 16 m.p.g. on petrol/benzole in road trim, although the racing fuel-consumption was only 7 m.p.g. The extremely fine performance was achieved without any very drastic hotting-up, most of the alterations only being made to ensure greater reliability at prolonged high speed. The lubrication system was converted to dry sump, a special external oil-pump being constructed, driven from the camshaft via a coupling which will shear easily shou!d the pump seize-up. The car turns the scales at 18 cwt., stripped for racing. Its performance, however, is well known to belie its avoirdupois and touring appearance. During the 1938 season the Alvis took a second and two third places in B.A.R.C. races and in winning the Phœnix Park race, which circuit it has lapped at 91 m.p.h., it averaged 88 m.p.h. for the 75 miles. Yet its owner says he would have no hesitation in running it on "Pool" should the occasion arise. Certainly, Michael May is an Alvis enthusiast, although he occasionally drove a works H.R.G. and Tuson's 1,100 c.c. Fiat. He is emphatic that the old three-carburetter "Silver Eagle" tourers will beat any Sports 3-litre Bentley in existence, although giving away nearly a litre.

Opening yet another shed, May showed us his faithful old "12/50" Alvis fabric saloon, and recalled that in 1934 he took a Special Award in the J.C.C. High Speed Trial with a very moderate 1926 example of this model.

RUMBLINGS—continued

Any "12/50" is, he says, absolutely reliable in standard form and the small port cars can always be made to give their 30 m.p.g. and 60-65 m.p.h. Incidentally, his brother still runs his "Silver Eagle" long-chassis tourer, which used to be well known in competition eight or nine years ago.

Just at present, Michael May does most of his motoring on a very beautiful "International" 500 c.c. Norton—on fine days, that is. He delights to point out that this motor-cycle, successor to his push-rod Norton, will do close on a speedometer 90 m.p.h., sits distinctly difficult corners at 75 m.p.h., and according to the makers develops 56 b.h.p.-per-litre, without greatly disliking "Pool," generally making sports cars look silly. I rather think it has put his all-aluminium pedal-bicycle very much in the background! A comprehensive store-room of Alvis parts and a lathe-equipped workshop indicate the care and toil that have gone into making his cars what they are. The stable is completed, apart from numerous pairs of skis, by his mother's 3-litre Hotchkiss fabric saloon, with its big luggage-trunk, neat push-rod o.h.v. engine and roomy, flat-floored interior, which was in use up to December, 1939, another 3-litre Hotchkiss for spares, Mrs. May's present mount, in the form of an early coil-ignition Austin Seven "Chummy" and—the B.P. Special. This last-named is a "Surbaisse Grand Sport" Amilcar chassis into which has been installed a three-carburetter A.C. Six engine. May designed a new central cross-member for the frame, which was skilfully made up by the local blacksmith, and a "12/40" Alvis gearbox is used, specially mounted so that the late type rubber mountings could be employed. The intention was to fit a Fiat multi-plate clutch and to find a differential for the back axle in order to obviate the need for buying one half-shaft per two trials. With an early three-seater Frazer-Nash body and beaded-edge balloon tyres, it has run in many such events and it now becomes available to anyone who cares to make an offer for it and who would give it a little exercise.

This visit brought back in full appreciation of what a great game the preparation of a car for racing is—or was. Michael May experienced it in full measure, being one of the most skilful amateur drivers in the country, as anyone who has studied his technique, notably his mastery of front-wheel-sliding, will agree. Apart from covering a very big annual road mileage at habitually rousing averages, he took a particular interest in events organized by the 'Varsity clubs and that select body, the Vintage S.C.C., elected him a vice-president at the end of 1937. He told us that his racing days are over and will not be resumed after the war, but we sincerely hope that this is merely a passing depression and that, his present preoccupation of aircraft accessory manufacture concluded, he will return to the pastime he formerly followed so ardently and successfully. He has, you will be pleased to know, offered to embark on a fuller description of the development of the "green Alvis" from his own pen, which we hope to publish quite soon. Meanwhile, if you see Michael's Norton in the mirror, pull over. . . .

A Bold Statement

Much of the interesting, but frequently misdirected argument that takes place about the relative merit of rival makes, not to mention the discussion which goes on as to which out of American, vintage, touring or modern sports-type cars is the best wear for sportsmen, could be abbreviated or avoided altogether if only speedometers told universally true tales of speed capabilities. Is it too much to hope that those who have been helping us to victory by devoting specialist knowledge to research and adjustment of delicate aircraft instruments, will be let loose after the war on the humble car speedometer? There is no need to emphasize in these pages the unfortunate discrepancies which timed tests reveal in the recordings of speedometers—false readings are almost universal, on expensive and inexpensive cars alike; nor is there any consistency of error which those seeking to correct such false-readings can bear in mind. Speed may no longer be the major criterion by which cars are judged, but speedometer inaccuracy masks poor performance in general, and makes accurate recording of acceleration figures virtually impossible for the ordinary user. Consequently, the warmest praise is due to R. G. Sutherland, Managing Director of Aston-Martin, Ltd., for showing in some detail, in his letter published in "The Autocar" of May 2nd, how even keen car owners can be hopelessly misled by "speedometer flatter." No less is Mr. Sutherland to be praised for his bold statement that on some of the 1931 "International" Aston-Martins the speedometer is accurately 10 per cent. high and that the 2-litre Aston-Martin, other than the "Speed Model," has a speedometer which in some cases reads about 5 m.p.h. fast at the car's true maximum of 85-90 m.p.h. Would that all manufacturers either fit speedometers of similar honesty or else, like Le Patron, dispense with this instrument altogether.

WE HEAR SOME MORE . . . .

That Capt. Cowell, now serving overseas with the R.A.S.C., was married recently to Miss Diana Carpenter. Cowell used to race the Winterbottom Alta and put up very fast road runs in a 2-litre sports Alta and Miss Carpenter drove a 1,100 c.c. Fiat saloon to the limit of its capacity and narrowly missed acquiring a Frazer-Nash recently. George Chaplin, of fast "Chummy" Austin and T.T. Austin fame, whom we last heard of motoring in an Austin "Ruby" saloon after owning a "12/50" Alvis saloon, was married recently to Miss G. M. Goodwin. Congrats. all round.

Roddy Seys expects to leave London soon on military duties and has bought a flat-twin two-carburetter B.M.W. motor-cycle to take with him. He has had meetings with Clutton and Rivers-Fletcher lately. Aston-Martin Ltd. have sold all their streamline 2-litres, but the experimental 2-litre has now done 10,000 miles and is going very nicely. The Follett Lea-Francis of the revived type is believed to have been bought by the Navy. A "30/98" Vauxhall is for sale at Deacon's Garage, Dorchester, Oxon, for £60.

* * *

OBITUARY

We much regret to learn that Lieut. Grogan, R.N., for many years the sole representative of the Senior Service at B.M.C.R.C. meetings with his Norton, went down with H.M.S. "Hood." He was also known as a Frazer-Nash exponent at Brooklands.

THE SPORTS CAR IN THE FUTURE

MR. LAURENCE POMEROY Technical Editor of "The Motor," frequently and very rightly puts forward the advantages of the streamline form of fast car. A recent article of his on this subject led H. C. Hastings to suggest, in "The Motor" of May 7th, that in future there will be room for other types as well. He visualises a streamlined "sports-racing" type, a "trials" type and a far more universal "sports tourer" for general sporting purposes. We think he is right, although we are not in entire agreement with all his arguments. For instance, he says against the streamline type that it could not be used over rough roads, for exploring moorland tracks or for trials, without risk of damage. This is true of *extreme* examples, but we should have no compunction in running a Lancia "Aprilia" in a trial, nor do we recall undue overhang on those freakishly-faired creations, the Burney and the *rear-engined* Crossley. Sales of cars of this shape are, we feel, more likely to be restricted on the score of extra garaging bulk, expense of construction and limited driver and passenger visibility. *Then*, Mr. Hastings says of the trials car that it is too harshly-sprung, has limited seating accommodation, skimpy weather-protection, is untidy, lacks civilized amenities and is not always too *manageable on corners*. That is true of certain trials specials, but hardly of B.M.Ws., "Jabberwock" V8 Fords, T-type M.G., "Cream Cracker" Midgets, and so on. The author overlooks the *typical small* trials car's biggest failing—namely, low gear ratios. A friend of ours tells a beautiful story of how he wrote to the makers of a famous British sports car asking them to quote their touring gear ratios, as those shown in the catalogue were too low for his fast travel requirements on the Continent and were apparently *intended for trials work*. Naturally, the reply was that only this one set of ratios could be had. . . . Trials cars, too, incline to low geared steering, because direct action is uncomfortable when wheels are *riding over deep ruts*. With Mr. Hastings's suggestion that a third type of car is desirable, able to cope fairly reasonably with main road fast motoring, off-the-beaten-track exploration, speed events and trials, we are in complete agreement. Britain made some excellent all-rounder sports cars before the war and will do so again afterwards. It would seem, too, that there might be scope for a development of existing utility car chassis. Unfortunately, with a few notable exceptions, when an established manufacturer decides to make a sports-tourer version of his utility production, he nearly always gets over-ambitious and wants to shorten the chassis, fit twin carburetters, special head, special camshaft, different gearbox, and so on and so forth, resulting in a very material price-increase over the standard chassis. This results in an excellent car for those interested in sheer performance with greater amenities than the out-and-out sports car offers, but there should be an excellent following for a more simple "gingered-up" utility production. A slightly higher compression-ratio, alloy head, hand ignition control, polished ports and, perhaps, a higher axle ratio, should give excellent urge to cars like the Hillman Fourteen, Humber Snipe, V8 Standard, Rover Twelve or Fourteen, Riley Twelve, Lanchester, Daimler, 3-litre Talbot, Wolseley Twenty-five, *etc., etc.* Modern cars of this type have really not too bad road-clinging qualities and, thanks to universal adoption of anchorage by Mr. Bendix, Mr. Girling or Mr. Lockheed, they stop quite decently. They are essentially British, and therefore reliable and well-sprung. Nearly always we see them as uninteresting closed boxes. Give them open bodies, perhaps as mildly aerodynamic two-seaters with emergency accommodation for another two, and modify them as aforementioned and even the smallest-engined types should do a genuine 70-80 m.p.h. and still be refined, quite economical cars, selling at around £400-£500 and having suspension and easy-to-control power quite reasonably suited to trials and rally type contests. This sort of thing has been done with American chassis, and the Allard has developed into one of the most potent trials cars, while, in "Light Sports" guise, the Railton, as Charles Follett has shown, becomes one of the greatest high-performance cars of all time. After the war, when car manufacture is resumed, British factories may well find the output of such cars a useful stop-gap, or at any rate, be glad to supply parts and accessories to auxiliary makers of British-basis "sports tourers." Maybe MOTOR SPORT will be able to say "We told you so." Reverting to Mr. Hastings's *article*, we rather like his view that the true enthusiast wants to use his car on every possible occasion, no matter whether the object be exclusively motoring or otherwise. But that *seems a trifle hard on the Edwardian* cultist, the Bugatti owner and the brewer of home-devised "specials." So shall we gently suggest that true enthusiasm verily expresses itself in varying and divers ways? . . .

PIECING TOGETHER THE EVIDENCE

IN the May issue a correspondent asked for information about the Arab; Cyril Peacock, of Gwynne Eight fame, did likewise in 1937 and, several replies having come through, he thoughtfully sent them in for dispatch to the more recent enquirer. This has been done, but as the marque in question arouses more than a little interest, it seems worth while piecing the available evidence together and publishing what it comprises. Donald Munro, then, contributed the information that a 2-litre Arab finished second in the 2-litre class to a Bugatti at Shelsley Walsh in 1929, its time being about 68 secs. He suggested that twelve of these cars were built in all, less than six of which were blown, and he believed the maximum of the unblown examples to have been about 82 m.p.h. The owner of the car run at Shelsley *reported inherent* weaknesses as a slipping clutch and poor brakes. Actually, the car was in production considerably earlier than this, and was described in "The Autocar" of November 19th, 1926, a *reprint* of which we used to hold; unfortunately, it has been destroyed. S. C. H. Davis quotes the engine as of 12.1 h.p. (70 x 120 m.m. 2-litre) with single o.h. camshaft, leaf valve springs, *separate four-speed* box, open shaft-drive and spiral bevel axle, and puts the *maximum at something* like 80 m.p.h. The engine was designed, he says, by Railton, and he recalls the ingenious adjustment of the chain driving the camshaft and auxiliaries. Actually, it seems *more likely that Parry Thomas* designed the engine, based on the 2-litre Marlborough-Thomas, and Railton the chassis, and we believe that Railton was a director of the Letchworth firm which *made the car*. A lot of evidence was contributed by F. E. Clampett, writing from Leyland, Lancs. He owned one of these cars in 1937 and suggested that the 2-litre was really the Spurrier-Railton, *the Arab being a* 1½-litre. He believed the former, in blown form, to be the first car to exceed 100 m.p.h. at Southport, a feat accomplished about 1927-8—probably the actual car of the present enquirer. His own car was reputed to have been owned by Birkin at one time, and had a 2-litre 13.1-h.p. four-cylinder engine with hemispherical heads, 1¾ in. ports, and a two-bearing crankshaft having 2⅜ in. main bearings and 2¼ in. journals. The carburetter was a type M.Z.P. Claudel-Hobson and dual ignition was used. The clutch was like a 1928 12/50 Alvis single-plate and the Meadows gearbox gave ratios of 3.6, 4.8, 7.0 and 10.4 to 1, reverse 12.0 to 1. The four-*wheel brakes had alloy* drums with cast-iron liners at the front and the Rudge knock-on wheels carried 5.00 in. x 20 in. covers. Steering was Marles; other items as above. 3,600 r.p.m. was taken as maximum engine speed, although 3,800 was possible, at which speed the velocity in third gear was 72 m.p.h. Using 60 x 135 carburetter settings in winter and 60 x 125 in summer, the fuel consumption was about 22 m.p.g. and 26 m.p.g. respectively, the latter setting being pretty useless in the cold. Road-holding, brakes and steering were praised. This reader also suggested that the number built was about twelve, and that Thomas did the engine, Railton the chassis, and that undoubtedly the fantastic chassis-price of £680 killed them. As to how many are left, we saw a chassis in a front garden in Hampstead some years ago, on which some film-producer had built a dummy closed body to represent a futuristic car, we believe for Wells's "*Shape of Things to Come.*" Monro knew of a two-seater at Colnbrook in 1933, but reported it worn out then, and F. E. Clampett's car may or may not be the one which has again turned up in Leyland. And that's absolutely all we have. . . .

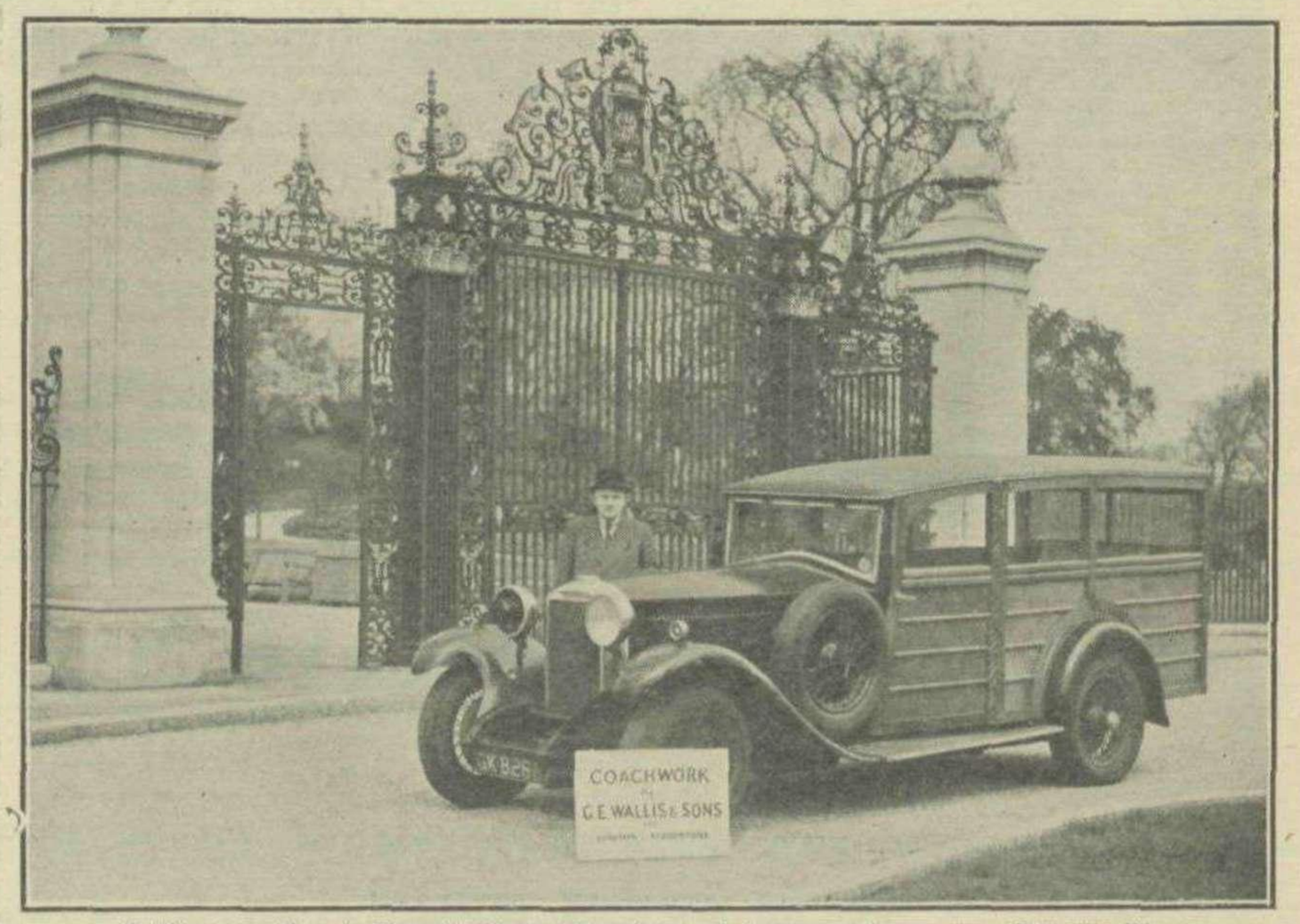
A UTILITY CAR WITH A DIFFERENCE

ROAD-TEST IMPRESSIONS OF A 4½-LITRE INVICTA WITH AN ESTATE BODY

A VERY large number of cars of the utility-bodied sort is now in service, on military or civilian wartime duties. There is a very great deal to be said for such cars, which are both light or medium-sized van and private car at one and the same time. Their practicability is, indeed, emphasised by their universal adoption by the British Army. G. E. Wallis & Sons Ltd. of 8, Duncannon Street, London, W.C.2, builders, decorators and electrical engineers, are now busy putting such bodies on to a variety of suitable chassis. From the enthusiast's viewpoint the idea is a happy one, whatever he formerly thought, for an old car that is to be laid up can instead, in many instances, be given one of these bodies "for the duration" and so be fitted for labours for which supplementary fuel rations are readily forthcoming. Or, again, when the need arises for a general-purpose vehicle, an interesting chassis can be chosen to accommodate it, so combining driving appeal with the ends in view. It is very easy to think of any number of interesting fast-car chassis well-suited to such duties. For instance, G. E. Wallis & Sons Ltd., under the direction of S. R. Jaques, late advertising manager of this paper, has recently completed such coach-work on 4½-litre Invicta and 4½-litre Bentley vintage chassis. The bodies are made of oak, birch and ash, in the usual style, and are extremely well-finished externally. Entrance is via two normal side-doors, which have winding windows, or from the rear, where the tailboard folds down and the full-width rear window lifts up to the horizontal position on outriggers. Normally, entrance to the seats that fill the interior would be made from the front, leaving the rear panel padlocked in position. With the seats removed, an extremely roomy van results, and very bulky articles can be loaded from the rear with ease. In the case of the Invicta a floor-space of 4 ft. 2 in. by 9 ft. 2 in. is provided, together with headroom enabling one to stand nearly upright anywhere within the car; moreover, this interior space is quite unrestricted. Sliding windows are fitted all round to offer normal vision and ventilation when passengers—up to eight in number—are carried, and every pane of glass is of the toughened variety.

The car's existing wings and running-boards are usually retained, which results in an unusually pleasing and unfreakish appearance. We recently undertook a 200-mile road-test of the 4½-litre Invicta so fitted, and the impressions gained were entirely favourable. The size of the vehicle is never even considered, the excellent vision afforded by the many windows making the concentration in handling less than with a normal saloon. On the other hand, the light, airy interior of the car is in no way uncomforting, and, in dismal traffic jams in dreary parts of London, one was at once conscious of the sense of big-car security that a long bonnet and deep-sided body impart. Moreover, this was backed up by the great performance of the car, even in this guise, for it easily led everything away from the lights. We gave it no timed tests, but a P-type M.G. Midget was easily beaten on acceleration when its driver was definitely trying.

The Invicta chassis was acquired second-hand and could have done with attention to various details, but it proved entirely satisfactory. The maximum speed achieved was 65 m.p.h., but at 50 m.p.h. this remarkable utility car got along with ample reserve in hand. The brakes were quite adequate, and the suspension seemingly unaffected by the overhang; probably the body-weight shows a saving over a normal passenger car. Some idea of the usefulness of this style of vehicle was demonstrated in the process of moving garage. Into the back we loaded a suit-case, a tin chest full of precious back-issues of MOTOR SPORT, a tool-kit, a tyre, two five-gallon oil-drums, and other odds and ends. The floor-space still looked ridiculously barren, even with four passengers up! Later we took a small car in tow, and there was no very great change in the manner of going! The Wallis war-conversion idea definitely appealed to us. . . . As to the Invicta, it was as interesting a chassis as you could wish to mount this body on. The right-hand heavy gear-lever worked well in its open gate, calling for distinct skill in changing down and some care coming up, save from third to top, when you could snap it through. The clutch action was excellent, as we learned when towing with a well-frayed clothes-line, and it seemed ready to take any punishment. Steering was quite low-geared and very light, making manœuvring easy. There was continued, severe kick-back through the wheel and a tendency to road-wheel shimmy, which attention to tyre-pressures and shock-absorbers would probably have cured, as the king-pin wear was not excessive, although clearly there was considerable front-end movement. The brake-pedal, too, indicated excess frame-whip somewhere. The engine started instantly from cold on operation of the S.U. starting-jet and ran with a definite power roar, which changed its note on the overrun. It had both coil and magneto ignition and ran well on the magneto alone but not on the coil alone. The engine was slightly sensitive to advance and retard. Quite rapid cornering could be indulged in and the roll was not excessive in spite of soft suspension. The driving position was excellent; the view down the shapely bonnet and over the high-set headlamps highly satisfactory, while the light, simply-constructed seats were quite comfortable. Minor criticisms were that the window-winders might have been a little nearer the door-centres and that the ignition warning light was too bright. The rear number-plate was rather low. The minor controls—throttle, ignition and lamps—on the wheel-centre worked well. The button pulled up to actuate the starter and went down to sound the Klaxon-note horn. Oil pressure varied with engine speed, staying at 40 lb. per sq. in. at cruising speed. The water temperature never rose above 85° C. except when stationary, and fell very rapidly as soon as the car moved off, indicating ample radiator area. The big autovac trapped about three gallons of fuel in reserve and the autovac main and reserve taps were reasonably accessible under the scuttle. A very rough check at first suggested a consumption of about 9 m.p.g., towing



A Vintage Sports-Car fitted out for present-day requirements. The Wallis utility-bodied 4½-litre Invicta

A UTILITY CAR WITH A DIFFERENCE—continued

included, but when a stop was made to clean a choked filter slight seepage was observed from the starting-jet pipe-line and when this was cured a better figure resulted, although no definite check could be made. The steering-lock, by the way, was excellent and the general impression was one of amusement and satisfaction at having all the fun of handling a thoroughbred fast car with so useful a body for present conditions. Troops extending optimistic thumbs appreciate it too, incidentally. The Invicta went about the task in hand in a husky manner and required sufficient skill in effective handling to make the shortest journey interesting. Under the bonnet the six-cylinder engine amply endorses these



By Courtesy of "The Commercial Motor"

S. R. Jaques, of G. E. Wallis & Co., Ltd.

impressions. The neat black valve-cover carries a detailed data-plate and the two H.V.S. S.U. carburetters on the off-side feed into a square section external manifold. The magneto, protected by a drip-tray, is on this side also; the coil and distributor on the near side, with the exhaust manifold, which has six off-takes and central pipe. There is a 4-bladed fan, the fuses are accessible and there is a well-placed oil-filler. The clutch and brake-pedals are fairly close and the accelerator is right-handed. The handbrake lever operated in true vintage style; it was very near the gear-lever. The 4-spoke steering-wheel was pleasantly thin-rimmed. The fascia carried two cubby-holes, thermometer, 100 m.p.h. speedometer, ignition light, petrol gauge, clock, ammeter, oil-gauge, starting-control, etc. Two spare wheels were carried, one each side of the scuttle. Past owners of the car may care to know that it is chassis A135. The gear-ratios are 3.9, 5.3, 7.5 and 11.2 to 1.

Of course, the Invicta may not be everyone's choice, but it does illustrate the possibilities of having fun with a car that is yet fully capable of justifying the fuel it is allowed. The body can be adapted equally successfully to more modern, high-powered chassis, and the cost is £120 complete, no matter to what it is fitted. Civil defence stations should welcome being able to have such bodies installed ready-made, as it were, and would do well to contact the makers—their 'phone numbers are Sloane 9443, Ashford 287, Maidstone 4058 and Gravesend 567. Any enthusiast whose family is engaged on war work calling for an Estate car will, we imagine, derive great pleasure from finding an appropriate chassis for Mr. Jaques's tape-measure. For ourselves, we look forward to trying the Wallis utility-bodied 4½-litre Bentley, presumably second only to Jack Fry's Bentley "lorry." Mr. Jaques deserves praise for giving old sports chassis a chance of continuing in service or of enjoying an unexpected fresh lease of life—apart from so usefully fitting out other chassis for war jobs.

STOP PRESS NEWS

750 CLUB RALLY

On June 8th the 750 Club, now under the sponsorship of Capon and Birkett, held a half-day rally at the Ely Hotel on Hartford Bridge Flats. The afternoon was devoted to a simple competition and those present were: Capon's Riley saloon; Mrs. Cowell's "1,100" Fiat saloon; Gilbert's Meadows H.R.G.; Gordon Woods's Frazer-Nash; Mrs. Birkett's 1932-3 style Austin Seven saloon with three-bearing engine; Capt. Moon's "Nippy" Austin Seven; Frost's Cozette-supercharged "Ulster" Austin Seven; Birkett's "Ulster" with down-draught carburetter and Alta alloy head, and Mallock's Austin Seven Special. Lush also attended with his orange T.T. Austin Seven, converted to downdraught induction instead of Cozette blown the day before. Boddy turned up for tea straight from wartime toil in his "Chummy" Austin Seven and Miss Worthington arrived soon afterwards in her twin-cam Anzani-Nash, still being run in, but fast enough to head the procession, with Boddy as passenger, to the Pirbright hills. Here Frost, Mallock and Moon disported themselves on the slime while the Frazer-Nash owners tried each other's cars. The active members then rejoined the fair sex at the "Ely," where Lacy's fine 3-litre Bentley had also appeared. A good party—and another is scheduled for July 6th at the Ashdown Park Hotel, Coulsdon; all enthusiasts welcome. Acting Hon. Sec.: S. H. Capon, 159, Upper Tulse Hill, London, S.W.2.

* * *

HAWKS M.C.

The results of the Cheltenham Scramble and Hill-climb were: Scramble: B. Holland (B.S.A.). Challenge Race: P. S. Falconer (Triumph Tiger 100); H.G. Race: W. Hopkins (497 c.c. Ariel). Hill-climb: D. Carter (250 c.c. Excelsior "Manxman"). Army Scramble Award: D. Winters (250 c.c. New Imperial). A. Lailey rode a beautifully-preserved vintage 398 c.c. A.B.C.—interest in old motor-cycles is growing.

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Railton Light Sports tourer.....	Dec.	1935
Railton Cobham 28.8 h.p. saloon...	Sept.	1938
Riley Nine "Monaco-Special," two-carb. saloon	March	1931
Riley Nine, 4-seater.....	June	1931
Riley 16 h.p., Big-four Kestrel saloon	June	1938
SINGER 1½-litre, 6-cyl., Le Mans 2-seater	March	1935
Singer Nine, 4-seater	March	1933
Squire 1½-litre, 4-cyl., 2-seater	Aug.	1935
S.S. I special-bodied 2-seater (1933)	Feb.	1934
S.S. I coupe	June	1933
Steyr Type XII, 14.35 h.p., Weymann saloon.....	Aug.-Sept.	1928
Stutz "Black Hawk" supercharged 4-seater	Jan.	1930
Stutz 5-litre, 8-cyl., 4-seater.....	Dec.	1927
Sunbeam 3-litre 6-cyl., (twin o.h.c.) fabric saloon	Nov.	1927
Sunbeam 6-cyl., 21 h.p., (push-rod) Speed Six saloon	Dec.	1933
TALBOT "90" Brooklands-bodied 2-4-seater	April	1931
Talbot "105" sports saloon	April	1934
Talbot 3½-litre saloon.....	March	1936
Talbot Ten "Rally" 4-str.....	Oct.-Nov.	1936
Talbot "105" Vanden Plas 4-str....	Nov.	1932
Talbot "90" 4-seater.....	Nov.	1930
Talbot Ten sports coupe.....	June	1938
Tatra 4-cyl., 1,154 c.c., coupe.....	Dec.	1932
Terraplane, 8-cyl. 29 h.p., 4-str.....	July	1935
Triumph 2-litre "Vitesse Six" saloon	April	1935
Triumph 10 h.p. "Gloria Southern Cross" 2-seater.....	June	1935
Triumph 10 h.p. "Gloria" saloon...	Jan.	1934
Triumph Nine "Southern Cross" 4-seater	June	1932
Triumph Eight "Gnat" 2-seater...	Aug.	1931
Triumph Eight, supercharged 2-str.	Dec.	1929
Triumph Dolomite 14/60 saloon.....	June	1937
VALE-SPECIAL 832 c.c. 2-seater...	Aug.	1933
Vauxhall 30/98 O.E. 4-seater (1925)	Jan.	1936
Vauxhall 30/98 O.E. 4-seater (1924).....	Dec.	1930
Vauxhall 20/60 h.p. "Hurlingham" 2-seater	Feb.	1930
Vauxhall 17 h.p., 6-cyl., "Cadet" saloon	Sept.	1931
Vauxhall 14 h.p. "Stratford" 4-str.	Sept.	1933
WINDSOR 4-cyl., 11 h.p., "Special" 2-3-seater	Nov.	1926
Wolseley Hornet Swallow 2-seater (1933)	April	1934
Wolseley Hornet (12.08 h.p.) saloon	Sept.	1930

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